Regulate, or else…

The EU procedure for harmonizing cross-border network codes for electricity

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Abstract

Traditionally, the member states have been especially concerned with national sovereignty in matters pertaining to energy. On this background, then, it is astonishing that a procedure that codified a decision-making process that was to result in a set of harmonized rules at the European level was passed by the European Union in 2009. Moreover, this mandate was given to non-state actors acting within European bodies outside the formal structure of the EU.

This thesis seeks to explain why the procedure for developing common cross-border network codes for electricity was enacted in its particular form. As a procedural rule, this represented a case of institutional change. Therefore, a complementary institutional approach was taken for analysing the process leading up to the formal decision from different perspectives in isolation and in combination. An important finding in this study was the decisive role played by non-state actors for the specific allocation of roles and tasks within the enacted procedure. Moreover, these non-state actors had emerged through a gradual transformation, which represented vertical specialization within government, and horizontal specialization within the industry. These changes fed back into their transnational associations, which were subsequently redefined.

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Writing a master's thesis is a bit like the legislative process in the European Union. Sometimes no progress is made, and one starts working on other things instead, whereas at other times, you almost cannot believe how fast changes can occur.

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These final months have been somewhat of a rollercoaster. As in a theme park, however, it is the ups and downs that make it exciting! At the end, then, major thanks go to friends and family for their support throughout this ride.

Mistakes and inaccuracies remain my responsibility.

Contents

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Acronyms and abbriviations

ACER	Agency for the Cooperation of Energy Regulators
BoR	Board of Regulators
CEER	Council of European Energy Regulators
DG	Directorate-General
DG TREN	Directorate-General for Transport and Energy
ENTSO-E	European Network of Transmission System Operators for Electricity
EP	European Parliament
ERGEG	European Regulators Group for Electricity and Gas
ETSO	European Transmission System Operators
EU	European Union
NC	Network Code
TSO	Transmission System Operator
UCPTE	Union for the Coordination of Production and Transmission of Electricity
UCTE	Union for the Coordination of Transmission of Electricity
UNIPEDE	Union of Producers and Distributors of Electricity

1 A novel procedure

1.1 Introduction

In 2009, the European Union (EU) formally passed a third package of legislative acts aimed at creating a single European energy market for electricity and gas, respectively. Since the initial launch of the internal energy market in 1988, two packages had already been enacted, but an internal energy market remained a vision rather than becoming reality. Member states were concerned with national sovereignty, and restricted the delegation of regulatory power to the EU in matters of energy (Buchan 2010; Eikeland 2004). Traditionally, energy had been particularly receptive to such concerns because of the strategic importance for national economies (Buchan 2010). Moreover, high costs of constructing infrastructure for the production and transport of electricity and gas, respectively, had facilitated close ties between national governments and their respective energy sectors (Mayntz & Scharpf 1995: 13-14; Nowak 2010: 27). As a result, only limited regulatory power had been delegated to the EU, and the EU-level laws that passed Council muster were heavily watered-down (Eikeland 2004).

The existence of different rules across the member states for technical and market issues regarding the physical cross-border 'transport' of electricity acted as a barrier to market integration. In several instances, these rules had the effect of protecting national markets, and obstructing a level playing ground, and suboptimal practices had been identified (Commission 2007a: 48; 2007b, 2007e; de Nooij 2011; Eberlein 2003). As a result, growth in the level of cross-border flows was slow, representing 10.7 per cent of total electricity consumption in Continental Europe in 2004, up from 8-9 per cent in 2000 (Commission 2005: 5).[1] Harmonizing rules, then, could facilitate cross-border trade, and aid the integration of national (or regional) electricity markets. While voluntary negotiations aimed at agreement on common rules had been attempted within the electricity sector (Eberlein 2003; Eberlein & Grande 2005), progress was slow, and little achieved (Commission 2007f). Harmonization could have been imposed from a supranational level, but given the lack of delegation to the

[1] UCTE zone.

EU in energy matters, the 'regulatory gap' applied equally to cross-border electricity transmission issues (Buijs, Bekaert & Belmans 2010).

On this background, then, it is astonishing that a procedure that laid down a decision-making process that was to result in a set of common – harmonized – EU-level rules was included in the third package, and moreover that it had remained largely intact from proposal to law. These rules were termed 'network codes', and would cover the technical and market issues for cross-border electricity exchange that were mentioned in the previous paragraph.[2] Despite member states' reluctance to delegate power, this procedure meant that a clear mandate had been given to make legislation at the European level, legislation that moreover would apply to cross-border electricity transmission. This is the puzzle that this thesis strives to solve.

In the following, a brief introduction to electricity transmission is offered, before moving on to describing this change of a procedural rule more in detail. This is then seen in light of previous research on institutional change within the EU in general, and in light of previous research on EU energy market reform in particular. Further, the meaning of the change is elaborated on, before a research question is formulated, and an approach for answering this is presented. An alternative approach to studying this will also be given attention. Finally, the structure for the remainder of the thesis is noted.

1.1.1 Brief introduction to electricity transmission

Electricity is bound to its infrastructure, and transported over networks. In Europe, there is no single electricity network, but rather 27 national networks constructed in various ways at different points of time (Pollak, Schubert & Slominski 2010: 25). These networks are transmission networks – high-voltage power grids for transmitting bulk electricity. A 'special' feature of electricity is the need for instantaneous balance between production and consumption at all times. This has two reasons, one of which is related to that which is transmitted, and the other to the system through which it is transported: first, electricity must be used the same instant that it is produced, because storing electricity at the present does not represent a viable economic option, and second, deviance from this balance could cause the electricity system to collapse, with ensuing power outages (blackouts). System operation is the activity seeking to retain such a constant balance.

[2] In early discussions, network codes were often referred to as technical and marked codes or standards. They were also referred to as grid codes.

In Europe, this task is usually carried out by Transmission System Operators (TSO), although other options are possible. A TSO is an enterprise with monopoly on transmission in the area covered by its network. Monopoly rights are allotted to the TSO due to the high costs of infrastructure for transporting bulk electricity, which makes it unprofitable to have competing sets of networks. This has been referred to as constituting a 'natural monopoly' (Mosca 2008; Samuelson 1948). Moreover, the costs incurred by a TSO are socialized: users of the network – producers/suppliers of electricity as well as some large industrial consumers – pay fees for access to and use of the network. To avoid abuse, TSOs are heavily regulated by the state, but ownership can usually be in public as well as in private hands. Historically, TSOs were integrated with companies producing electricity, but have over time become increasingly independent entities in Europe (ENTSO-E undated-c; UCTE 2009). Most European countries have a single national TSO.

National systems are linked together through interconnectors. These are transmission networks operated jointly by the TSOs at each end: the respective TSOs at each side of the border coordinate this between them.[3] Internally, the individual national networks are relatively well-connected, whereas the degree of connection between these national markets is substantially lower. This represents a physical barrier to cross-border electricity flows (Meeus, Purchala & Belmans 2005: 29). The background for this is that interconnections between the national systems were not initially created for the purposes of extensive cross-border electricity flows (Zeit 2006b). The network codes given attention in this thesis regard the coordination of TSO on interconnectors, because the purpose and goal of the procedure is to establish a common set of rules for cross-border electricity exchange. Thus, while not affecting the amount of physical capacity on interconnectors per se, it might affect the use of this capacity. Thus, these codes could influence cross-border network operation as well as cross-border trade across borders.

1.1.2 New associations engaging within a new procedure

Beyond the procedure for developing common cross-border network codes for electricity ('the NC procedure'), the two pan-European associations – European Network of

[3] Many national electricity systems are part of a synchronous zone (Continental Europe, the Nordic countries, and the UK are examples of such zones), within which balance also must be retained, thus requiring cross-border coordination among the TSOs within a zone.

Transmission System Operators for Electricity (ENTSO-E) and the Agency for Cooperation of Energy Regulators (ACER) – were established with the third package.[4] ENTSO-E was a single, comprehensive EU-level association for TSO cooperation, whereas ACER was a European regulatory agency. A regulatory agency, or regulator, can be defined as a body separate from its sector ministry that carries out public tasks (Christensen & Lægreid 2006a).

These two bodies would moreover carry out central tasks within the NC procedure. Network codes would be drafted by the TSOs acting within ENTSO-E. Network codes would apply generally for the transmission of electricity across national borders within Europe, and they could be made legally binding. Moreover, the TSOs were to draft network codes in accordance with non-binding framework guidelines created by the national energy regulators through ACER. Framework guidelines, moreover, would be based on priorities laid down in the procedure. The NC procedure was part of the Electricity Regulation, which made these tasks mandatory. Failure to deliver a particular network code within a specified timeframes would be sanctioned in the sense that this would then be transferred to ACER, or eventually the European Commission.[5] Similarly, for ACER, failure to deliver a specific framework guideline on time would mean that the Commission would write it on their behalf.

1.1.3 Previous research on institutional changes within the EU

Formally changing a procedure is an institutional change. This has been studied for the EU in general as well as pertaining to the EU energy market reform in particular. Located within the literature of the former, Kelemen and Tarrant (2011) find interests to be the decisive factor, claiming that the level of distributional conflict among the member states is decisive for the direction of institutional change: a high distributional conflict will result in a compromise on a network, whereas a lower conflict makes a compromise on establishing an agency more likely. In a similar vein, Héritier (2001) finds support for such bargaining processes where actors' preferences are influenced by distributional effects, but that simultaneous negotiation on multiple issues allows for package deals or issue-linkages (Héritier 2001: 61). On a related note, Dehousse (2008) argues that the establishment of European regulatory agencies reflects

[4] ENTSO-E through Regulation (EC) No 714/2009, and ACER E through Regulation (EC) No 713/2009. These regulations will be referred to as the Electricity Regulation and the ACER Regulation, respectively. ENTSO-E was established by the TSOs in December 2008, before the third package entered into force in 2011 (ENTSO-E 2011b).

[5] The latter if ACER too would fail to draft a network code on time.

an agreement among multiple actors to delegate, yet as a least common denominator, such agencies remain relatively weak.

To this, Thatcher (2011) adds the vested interests of national regulators. He claims that the shape of institutional design in terms of the power allotted to such agencies is a function of differences in pre-existing arrangements. While a self-interested Commission might support such agencies, the existence of networks of national regulators have represented a barrier to this kind of institutional change due to concerns of the latter with their individual influence.

Pierre and Peters (2009), however, indicate that such transnational networks can indeed be replaced with EU-level agencies. In a case study of institutional change, they find that this is best explained by an agencification trend, which means that the establishment of agencies in related EU policy-areas created a functional pressure for a similar step (Pierre & Peters 2009: 351). Establishment of EU agencies has become an important part of the European executive order (Egeberg & Curtin 2008). Generally, such a trend has also been reported by Egeberg (2006a, 2006b); and Martens (2006). However, Pierre and Peters (2009) also find that this trend was reinforced by interests: a Commission interested in expanding its regulatory scope, as well as industry's demand for legal uniformity across Europe (Pierre & Peters 2009: 351-352). Finally, McNamara (2001) draws attention to normative changes, and shows how rules had to be adapted according to the dominant norms in order to legitimize an organization and its policies.

Thus, previous research on institutional change in Europe has found this to result from different factors, including self-interested actors like the Commission and the member states; the pre-existing institutions already in place among non-state actors (e.g. national regulators or businesses) and the perceptions of these; and trends in terms of institutional shape (notably an agentification trend).

Previous research on EU energy market regulation has noted that the presence of a threat of intervention by the Commission gave rise to the Florence Forum (an informal biannual gathering of various actors within the electricity sector) and kept the deliberations going (Eberlein 2003). Referred to as a "shadow of hierarchy" within the governance literature on the EU, such a threat has been expected to affect the influence the behaviour of actors engaging in negotiations (Börzel 2010: 194-197). However, while the Commission's shadow might have contributed to the establishment of the Florence Forum, consistent with the argument made by Héritier and Eckert (2008) that self-regulation through transnational

networks is more likely to emerge under a shadow of hierarchy, for resolving differences in negotiations this shadow arguably lacked credibility due to the well-known resistance among the member states to more ambitious energy market legislation, and because the Commission's power could only initiate legal proceedings against individual transgressors of competition law.

Research on the European energy and climate policy has also looked at developments through the lenses of integration theory, comparing the extent of decision-power transferred to the supranational level for the two policy areas (Wettestad, Eikeland & Nilsson 2012). Regarding the relationship between these two, Pollak et al. (2010) see climate change as a major driver for developments in internal energy market policy, whereas Hildingsson, Stripple, and Jordan (2012) claim the opposite by regarding the internal energy market as an important driver for renewable policy.

Moving to previous research on the third legislative package, attention has been given to research has focused on ownership unbundling, which was regarded as an important issue in the Electricity and Gas Directives, respectively. This was proposed as becoming mandatory, yet the Commission's proposal was watered out following controversy among the member states (Eikeland 2011a, 2011b). Scholars have also looked at the establishment and role of ACER as a new EU-regulator, regarding it as rather weak (Böttger 2010; Hancher & Hauteclocque 2010). The analysis by Böttger (2010) corresponds to the above mentioned findings in Dehousse (2008). Finally, it has been pointed out that the effects of the third package's institutional changes, pertaining to cross-border electricity regulation, remains to be seen, as this will reflect still evolving practice (Eckert 2011; Hancher & Hauteclocque 2010).

Some researchers have given attention to the NC procedure (Eckert 2011; Hancher & Hauteclocque 2010; Hauteclocque & Talus 2011; Squicciarini, Cervigni, Perekhodtsev & Poletti 2010). While some regard it as an incremental change that represents little modification to the de facto status quo of TSO self-regulation (Hauteclocque & Talus 2011), others note that the new procedure could indicate a "a radical departure from the bottom-up approach of the regional process" (Squicciarini et al. 2010: 15). While the two latter contributions give more attention to the NC procedure, this is part of another, larger research objective. To this author's knowledge, then, no systematic study has previously been undertaken of this procedure.

1.1.4 The research question

It is surprising that the member states would allow such centralization at the European level given the mentioned reluctance to delegate power to the European level. In this thesis, then, the main undertaking will be to explain *why the procedure for developing network codes was enacted in its particular form*. This consequently represents the research question of this thesis. As the practical implementation of the third package is a relatively recent process – in some cases incomplete – this remains outside the scope of this study.[6] Moreover, while a similar Regulation equally part of the third package was passed for the related gas sector, this will not be studied due to concerns for limited time and resources.

This represented a change of the electricity market regulation in Europe. Regulation is here defined as the "sustained and focused control exercised by a public agency over activities that are valued by a community" (Selznick 1985: 363) for the purpose of correcting for market failure (Majone 1996). Within the NC procedure, however, an association consisting of regulated enterprises with national monopoly on transmission networks, ENTSO-E, would partake in the making of rules that would apply to cross-border transmission. Nonetheless, this work would build on framework guidelines and the priorities set by the EU in the Electricity Regulation, as well as monitored by ACER and the Commission. Notably, non-compliance would be subject to sanctions.

A common approach to changes in EU legislation is through integration theory. Integration theories seek to explain the transfer of decision-making power from the national to the European level (Schimmelfennig & Rittberger 2006). Such theories have also been utilized for studying incremental integration as a result of 'normal' policy-making, , i.e. through directives, regulations and decisions (Hix & Høyland 2011). However, integration theory does "not tell us what specific rules and policies emerge, or what organizational form supranational governance will acquire" (Stone Sweet & Sandholtz 1998: 16). For this purpose, integration theory is too general, as it concentrates on the conditions influencing when decision-making competence is transferred to the EU level, and not on the specific manner of how legislation passed within the EU system looks like. As a result, middle-range theories rather than grand theories are more adequate for addressing the research objective in this thesis. Nevertheless,

[6] In October 2011, 6 months after the deadline for transposing the third package, it was reported that infringement procedures were being considered against 18 member states that had failed to implement this legislation completely and/or correctely (EurActiv 2011).

as the former offers a complementary account to the latter by explaining phenomena at a lower level of abstraction (Rosamond 2010: 108), the relation between the NC procedure and integration of energy policy will be discussed in chapter 6.

The NC procedure was a formal change of a procedural rule, and as such represents a case of institutional change. Therefore, an institutional approach will be taken.

1.2 An institutional approach

As indicated in the presentation of previous research on institutional change – a tip of the iceberg – there is a large body of research that subscribes to the statement that "institutions matter": institutions are considered important causal factor in accounting for the content and output of public policies. There are several perspectives on institutional change and institutional design, and differences exist as to which causal factors are utilized for explanatory purposes. This will be discussed in chapter 2, suffice here to briefly state that the perspectives to be applied in this thesis are the following: a power-oriented perspective that looks into the interests of those actors supporting a change; a sociological perspective tracing the origins of the particular shape and form of the outcome; and a historical perspective that addresses the role of sequencing of events and the effect of initial choices on later developments. While these perspectives have differing understandings of institutions as well as of institutional change, they all include a formal change of a formal rule.

Moreover, a process-approach will be taken in order to identify the presence and impact of these causal factors in the steps leading up to the EU's formal decision on the procedure for developing cross-border network codes in 2009. A further elaboration on the advantages of such process-tracing is found in chapter 3.

1.2.1 Defining the outcome to be explained

The phenomenon to be explained in this thesis is the institutional change and the shape of this change. The change was a formal change of a procedural rule. Why did it end up looking like it did? What factors influenced its institutional design? As such, the primary object of interest is the specific shape and form of the procedure. A procedure is a rule for how to make a rule. In general, rules "prescribe appropriate behaviour in particular settings and thus are collective attributes" (Stone Sweet, Fligstein & Sandholtz 2001: 6). Moreover, rules vary along three

dimensions: prescriptions of behaviour range from broad to specific ('precision'); from the informal to the codified ('formality'); and finally, the extent to which transgressions give rise to sanctioning, ranging from the voluntary to the compulsory ('authority') (Stone Sweet et al. 2001: 6-7).

Procedures represents a particular type of rule because these rules "determine how actors and organizations make all other rules" (Stone Sweet et al. 2001: 6). This entails that procedures describe what tasks are to be carried out by which actors, and how the latter are to relate to one another. The level of precision in such a description can be general or detailed. Moreover, the formality with which this information is contained spans from informal standards to codification in a legal document. Finally, while the actual influence of a procedure is an empirical question, its formal influence on the decision-making process is a function of its bindingness, ranging from voluntary to compulsory. An additional feature pertaining to the latter is whether or not deviation from prescribed behaviour is linked to sanctions – a link that equally may vary along the three dimensions.

As such, a procedure formalizes the roles and tasks of actors involves in a decision-making process on making specific rules, in this case common cross-border network codes. A procedure can describe which (type of) actors are to be involved in the making of a given set of rules, as well as how and where these rules are to be constructed and/or revised. A procedure can describe the relationship between actors, for instance through regulating voting rules and assigning veto power to specific actors at various stages of the process of making rules. Figure 1 summarizes the dimensions on the dependent variable.

Features of rules and procedures	Precision (broad-specific) Formality (more-less) Authority (voluntary-compulsory)

Figure 1: Dimensions on the outcome of interest.

1.3 Outline of the thesis

In this chapter, the topic and the research question were presented. The topic of chapter 2 is the theoretical framework, and three neo-institutional perspectives are presented in depth. Instead of regarding institutions as sources for stability *only*, the presentation will focus on explaining institutional change. Moreover, the different understandings of factors bringing about institutional change are seen in relation to the possibility for institutional design. Moreover, theoretical expectations to the case are derived, before concepts are operationalized. In chapter 3, the method used for collecting relevant data is presented. Through process-tracing, factors expected to have caused the change of the procedural rule will be identified, which also provides an opportunity for tracing the link connecting the expected explanatory factor to the enacted NC procedure. In chapter 4, the empirical development over time is presented, starting with the situation prior to liberalisation of the energy sector, followed by a presentation of the development from the 1990s including the first and the second legislative packages, and until the formal decision on the Third Package in 2009. In chapter 5, the empirical data is analysed first separately from each perspective, before a comprehensive analysis is undertaken. In chapter 6 concludes the thesis. In that final chapter, the main findings are presented, and methodological implications are evaluated. Implications for further development of EU energy market regulation are drawn, and the question is raised as to the effect on the pace towards the internal energy market. Further, implications for theory and aspects for future research are indicated. Attached in the annex is the list of organizational affiliation of informants and the interview guide.

2 Theory

As stated in chapter 1, this thesis aims to explain why the procedure for developing common cross-border network codes for electricity (NC procedure) was enacted in its particular form. As a change of a procedural rule, this represents a case of institutional change. In the following, attention will be given to a complementary use of multiple perspectives, before each perspective is presented more in detail. Expectations as to why the procedure for developing network codes was enacted in its particular form will be offered, along with operationalization. While there are stabilizing aspects to institutions, in this chapter the emphasis is on the factors of change.

2.1 A complementary approach

Because the purpose here is to explain the formal decision on a new procedure, this represents a case of formal institutional change. Therefore, perspectives will be drawn from neo-institutionalism, a stream of thought inquiring into the effect of institutions on outcomes. As noted by Hall and Taylor (1996) as well as Peters (2005), neo-institutionalism is a diverse theoretical group, which thereby offers the opportunity for a complementary approach (Ostrom 1990). The case for a complementary approach is further strengthened because different neo-institutional perspectives have different theoretical underpinnings, and explain different aspects of institutional design (Hall & Taylor 1996; Tallberg 2010). Institutional design refers to "the process whereby institutions are created or emerge with a specific set of properties" (Tallberg 2010: 634). Moreover, chapter 1 showed that expectations from different neo-institutional perspectives have been confirmed in previous research. With a purpose of explaining why an institutional change occurred as well as the ensuing institutional design, then, a complementary approach will be utilized in this thesis – drawing on different perspectives in order to explain as much as possible of this particular outcome. Thus, the purpose of utilizing multiple perspectives is not to test theory, which would require a cross-case approach rather than a single-outcome study.

Inspired by previous categorizations (Hall & Taylor 1996; Tallberg 2010), the three perspectives that will be utilized are power-oriented, sociological, and historical institutionalisms. These perspectives with their respective expectations approach institutional change from different angles: power-oriented institutionalism draws attention to the role of

power and interests; historical institutionalism points to the importance of initial choice followed by path-dependent developments; and sociological institutionalism underlines the role played by legitimate models and their subsequent imitation. These perspectives will be utilized separately and in combination in order to explain the outcome.

As highlighted by Roness (2009), different strategies for the usage of several perspectives exist. This thesis makes use the strategy of complementing, where different theoretical perspectives are utilized in order to explain as much as possible of the case at hand (Roness 2009: 3). The purpose of using several theories is that the sum of these parts will give a more complete picture of the truth – a picture that might be less fit for generalizing (Roness 2009: 7-8). This resembles the domain approach (Tallberg 2010), where different utilized perspectives explain different parts of a phenomenon, thus complementing one another. While the complementary strategy has no absolute requirement that perspectives should not overlap – in the sense that they should explain different parts – the domain approach has a stronger demand for such a clarification, thus resembling another strategy presented by Roness (2009) namely that of *contrasting*. This strategy seeks to find the best perspective among several utilized and thus competing ones, and the purpose is thus to test the theories with the aim of generalizing the findings. As competitors, delineating the 'borders' among the perspectives becomes important (Roness 2009: 3, 9-10).

As already noted, the strategy of complementary perspectives will be used in this thesis, because of the shape of the research question, which seeks to understand why the EU passed this particular procedure. It can be useful to approach a phenomenon from different angles in order to get a more complete explanation. Nevertheless, indicating the 'domain' of the perspectives might still be relevant, because it facilitates understanding which particular factor caused a particular part of this phenomenon. Therefore, separate analyses will be carried out before integrating these to a comprehensive explanation. The integrated analysis has the potential to offer a deeper explanation of why this procedure was enacted by the EU than as seen from separate perspectives seen in isolation. Thus noted, the different perspectives will be presented in the following.

2.2 Power-oriented institutionalism

This perspective regards the interests of actors and their respective relative power as the main factors influencing institutional outcomes, in this case in the formal decision on the NC procedure in its particular form.

2.2.1 Logic of consequences

Interests are within this perspective seen as reflecting concerns for distribution. Actors are seen as particularly concerned with the relative distribution of power, which follows from the basic axiom of self-interest. Distributive implications can be defined as consequences for an actor's share of something, normally the share of material goods, but it could also be immaterial goods like formal influence or role/task allocation. Moreover, interests are seen as *exogenous* to institutions (Aspinwall & Schneider 2000: 7), in the sense that they are causally prior to these.

Behaviour occurs according to a logic of consequences, where actors evaluate alternatives in terms of expected outcomes (March & Olsen 1989: 23). It should be noted that rationality is bounded as actors do not possess complete information regarding outcomes, and as such the *expected* distributive outcomes become the relevant factor. Actors are thus seen as instrumental, because their behaviour stem from consistently ordered preferences that are deducted from given interests (Hall & Taylor 1996: 944). Striving to realize their interests, then, "institutional actors seek policy outcomes that correspond as closely as possible to their preferences" (Rosamond 2010: 110). Finally, action is strategic, as actors choose the course of action that is optimal *given* the course of action that other actors are expected to choose (Hall & Taylor 1996: 945).

2.2.2 Plastic institutions chosen by the dominant coalition

As within the 'rational choice institutionalism' of Hall and Taylor (1996), institutions remain in place due to the benefit offered to the affected actors. Actors cooperate when they consider it to be in their interest. Politics are considered "a series of collective action dilemmas" (Hall & Taylor 1996: 945), where individual rationality can cause collective irrationality. Strategic actors might therefore agree to establish institutions in order to avoid such unwanted outcomes. Benefits could be achieved by reducing transaction costs as commitments are made

more credible. As a rational tool for realizing interests, this explains the establishment, as well as the survival, of institutions: Institutions survive as long as they are supported by the strongest coalition of actors (Hall & Taylor 1996: 945; Tallberg 2010: 634).

In a situation in which no actor is hegemonic, change can be brought about following a change tipping the winning coalition (see e.g. Eikeland 2011b). This applies to European politics, where some nation-states are more powerful than others, yet where no single actor is powerful enough to push through changes on its own. With an interest in change, an actor will support the coalition for change. Moreover, a coalition can gain or lose support if there is a change in interests or preferences of actors; or if the relative influence of actors is changed in a manner that changes the relative support of a coalition. A change in preferences implies a change in an actor's evaluation of the distributive terms of the status quo versus those of alternative solutions.

History is seen as effective in the sense that interests of the powerful actors are seen as reflected by the institutional framework (Tallberg 2010: 636). Moreover, institutions are seen as plastic, because they change relatively quickly in accordance with changing coalitions, thereby reflecting power relations. Existing institutions, then, can be regarded as a snapshot of current power relations. The ability for a given actor to attain its highest preference is a function of the relative power of this actor (or of the coalition supporting this) as compared to that of other actors. In an institutional setting, the decision-rules will reflect this distribution of power.

Self-interested actors will try to shape institutions to their advantage, with the more powerful actors more able to attain such an outcome. When negotiating everything is 'up for debate', i.e. changes are subject to the support of the required majority. Institutions are designed to be tools that can be utilized in order to realize preferences, and rational actors make sure to be updated on the various possibilities available in the tool box as well as previous experiences with these different tools (Røvik 1998: 32). With an instrumental view of institutions, moreover, preferences could be expected to be adjusted according to experiences in the sense that a failure of an institution to fulfil its function will cause actors to change their stance towards this tool (Peters 2005: 62).

In general, then, institutions are initiated, maintained (or dissolved) and shaped by the most powerful actors; serving to "safeguard and advance, rather than challenge and circumscribe the interests of the dominant parties" (Tallberg 2010: 636). As a result, institutional stability

as well as change is the product of actors' preferences. The preference of an actor towards institutional reform is a function of the expected distributive gains this actor can get from changing an institution as compared to the status quo. If the gains yielded to an actor under the existing arrangements are greater than those expected following change, this actor would defend the status quo, and oppose change. Opposite, if the expected gains from a potential alternative are greater than the ones yielded by the status quo, the actor will support change. It thus matters whether an actor has a vested interest in changing or maintaining the status quo. Change, moreover, is a "conscious process" (Peters 2005: 62), because it results from an active choice by actors to support a formal change. Thus, institutional change is a matter of choice, subject to the support of a majority representing the 'winning' coalition. Actors instrumentally choose the institutions they want based on an evaluation of gains and losses.

2.2.3 Applying this framework on the EU

This perspective regards the actors with a formal influence on decision-making as relevant. In the EU legislative processes, the main organizations are the Commission, Parliament and Council. As such, inter-institutional relations and the relative influence of actors could affect outcomes, with drafts usually being passed back and forth between organizations. Consulted, yet without a formal role, are private or subnational organizations (e.g. national regulators, TSOs, business), which therefore are left outside the scope of this perspective. Here, actors are organizations. For analytical purposes, such actors are treated as unitary, meaning that internal divisions are regarded as being solved internally, with the organization behaving as a single actor externally. An exception from this is made for Council, where, given the power of national governments, will be treated as an arena rather than as a single actor. This is a pragmatic and empirically reasoned approach.

The influence of the Commission and EP depends on the extent of power that is delegated to the supranational level – or, alternatively, retained nationally. Until the Lisbon Treaty, energy was a policy area where the distribution of competence was implicitly shared between the EU and its member states.[7] Shared competence implies that member states and the EU have the competence to make and adopt legislation, and that competence remains with the member

[7] An explicit and comprehensive treaty basis for EU-level competencies on energy only came into force with the Lisbon Treaty (Pollak et al. 2010: 109). Energy remains an area of *shared competence* (EU 2008: article 4.2; Hix & Høyland 2011: 6) – with some important exceptions pertaining to e.g. energy mix (EU 2008 : article 194.2).

states until exercised by the EU (Hix & Høyland 2011: 6). With powers being implied rather than explicitly given, there was a need to refer to formal competence. In the past, "policy-makers borrowed legal competence from the economic and environmental parts of the treaties to justify proposing and passing energy measures (Buchan 2010: 360). With this dynamic inherent pertaining to issues of shared competence, this could be expected to give the member states a leverage vis-à-vis the Commission and Parliament, because it is relatively easy to reject proposed legislation on grounds of lacking a basis in the treaties.

Expected preferences of the relevant actors

Actors evaluate options in light of their distributive terms, and, drawing on Kelemen and Tarrant (2011), the following preferences of EU actors can be identified: In general, the *Commission* has a general preference for more integration and supranational solutions, as well as an institutional self-interest in expanding its own powers (Kelemen & Tarrant 2011: 927). While its first preference is delegation to itself, a second-best would be the delegation to an EU-level agency or an EU-level network (Héritier & Lehmkuhl 2011: 56; Kelemen & Tarrant 2011: 927). With regard to network code development, then, the Commission's first preference would be to do this itself, with a second-best option being an EU-level body mandated with this task.

In a similar vein to the Commission, the *European Parliament* is also seen as preferring integration and supranationalism. Parliament is also seen as in possession of an institutional self-interest: increasing its power vis-à-vis the Commission, and especially the Council. The strategy of Parliament here is to increase its oversight powers of comitology, i.e. "oversight power with respect to EU executive bodies that implement EU directives" (Kelemen & Tarrant 2011: 928). Being more receptive to diffuse interests, Parliament has promoted transparency and accountability in comitology and in general: "To this end, the Parliament has demanded the establishment of transparent, accountable regulatory bodies and processes that can be subject to fire-alarm oversight by the diffuse public interest groups that are strongly allied to the Parliament" (Kelemen & Tarrant 2011: 928). Parliament's first preference, then, would be delegating the task of developing network codes to an EU-level body, with an oversight role given to Parliament itself (e.g. within comitology). A second preference would be a general mechanism of regulatory oversight carried out by an EU-level actor independent of national governments and of the Commission.

Member states within the Council will seek to institutionalize cooperation in order to reduce transaction costs, among others by enhancing credible commitment. However, the shape of this institutionalization is affected by concerns for distributive terms: In cases of *high distributional conflict*, member states are less likely to delegate power to the supranational level (as desired by the Commission and EP), but when they do, it is expected that they delegate tasks to a loose and horizontal network (Héritier & Lehmkuhl 2011: 56; Kelemen & Tarrant 2011: 930). This is because member states have an interest in retaining control over policy areas with distributive implications. In cases of *low distributional conflict*, on the other hand, member states expect potential losses to be small, and are expected to enter into a compromise with the Commission and Parliament to establish an independent EU-level agency. The agency, moreover, is given authority to make regulatory decisions applying for the entire EU, yet national representatives are represented within this agency, usually by national regulators (Kelemen & Tarrant 2011: 931). Member states thus have two preferences, with are conditional: first, if the distributional conflict is low, the member states will accept an EU-level regulatory agency; and second, if the distributional conflict is high, member states will opt for the looser alternative of a network. If network code development is characterized by the need for a European solution, yet at the same time by a high distributional conflict, member states will opt for a network. In a similar vein, if the distributional conflict is low, member states will accept a formal EU body mandated with this task.

Under the co-decision procedure, then, in order to have been enacted, it is expected that the procedure for network code development would have had the support of the Commission as well as majorities within Council as well as Parliament. It is expected that the Commission had received a mandate by the member states to table a formal proposal on this. The mandate of ENTSO-E and ACER within the procedure for developing network codes is expected to have been perceived by member states as of low distributional conflict by member states, with Commission and Parliament supporting this as their respective second-bests.

Distributional conflict is operationalized as high if member states state that a proposed measure will intervene with national governments decision-power over their respective energy sectors; and low if they state that it does not affect these national arrangements. *A mandate given to the Commission by member states* is operationalized as official statements from the Council calling for legislative proposals. An *interest* is operationalized as position towards a formal proposal for institutional change, with preferences divided between

supportive and opposed. With a support preference, an actor will join the supporting coalition, whereas an actor with an opposing preference, it will join the opposing coalition. For the Commission, support is operationalized as initiation of a legislative proposal, whereas for Parliament and the Council this is operationalized as a majority voting in favour on this piece of legislation, respectively.

2.3 Historical institutionalism

The historical institutionalism to be applied here differs somewhat from other understandings of this perspective. While other scholars have drawn elements from the socialogical or rational power-oriented perspectives (Hall & Taylor 1996; Peters 2005), here, an intermediate approach resembling that of Aspinwall and Schneider (2000) is utilized. The second perspective resembles the power-oriented perspective in its definition of institutions as formal rules, procedures and organizations. However, the historical perspective is distinct in that it places actors and their respective interest in a temporal context. This has implications for the possibilities for institutional design. According to (Pierson 2000), there are two key theoretical parts of this: First, a path-dependent development must be identified. Here, the separate stages of this path-dependency must be identified, explaining *why* and *how* subsequent developments remained on this path. Second, this development must be placed on a temporal dimension in the sense that it must be analysed "in the context of other processes of historical change" (Pierson 2000: 80). Specific for this perspective, then, is the view that "institutions emerge and are embedded in concrete temporal processes" (Thelen 1999: 371).

2.3.1 Path-dependent institutions

The relative stability of institutions over time has brought scholars to regard institutions as path-dependent. Pre-existing institutions have been described as pushing subsequent developments in a certain direction (Hall & Taylor 1996: 941); channelling and constraining change (Pierson 2004: 133); constraining the range of possible alternatives (Rosamond 2010: 111); or constraining change (Thelen 1999: 387). *Studying* path-dependency, however, requires identifying the initial step that put subsequent developments on a path, as well as the mechanism by which these remain on this path. Seen in the light of its consequences for the later course of events, this initial step is a critical juncture, and has been described as a "period of significant change" (Collier & Collier 1991: 29). A critical juncture generates

positive feedback (Pierson 2004: 51, footnote 26), which is the mechanism through which path-dependency arises. The initial path is strengthened over time due to positive feedback – it becomes path-dependent. Over time, this makes an alternative course of action that was possible earlier, less likely to be taken later on. This is due to the processes of positive feedback that reinforce the initial choice, and increases the distance to other initially available options (Capoccia & Kelemen 2007: 341; Pierson 2000: 74-75): "once a response is adopted, it may generate self-reinforcing dynamics that put politics on a distinctive long-term path" (Pierson 2000: 82).

Critical junctures and positive feedback

Critical junctures have been understood as "relatively short periods of time during which there is a substantially heightened probability that agents' choices will affect the outcome of interest" (Capoccia & Kelemen 2007: 348). Moreover, it occurs in a situation where "the structural (that is, economic, cultural, ideological, organizational) influences on political action are significantly relaxed for a relatively short period" (Capoccia & Kelemen 2007: 343). This initial choice, then, is taken by influential actors utilizing a window of opportunity (Kingdon 2003) in a time of "institutional fluidity" (Capoccia & Kelemen 2007: 354). A critical juncture triggers new and other feedback effects, and this increases the probability that the outcome to be explained will ensue – on this new path, it is more likely to occur than on the previous path (Capoccia & Kelemen 2007). Because of the difficulty of operationalizing a situation of institutional fluidity, the approach to critical junctures in this thesis will be to define these in terms of their consequences: if feedback effects are identified that differ from those found at an earlier period, a critical juncture is understood as having taken place. This differs from a functionalist approach, because the juncture is not defined in light of its consequence on the outcome of interest. This juncture will moreover be traced back to its initial constitutive step: behaviour by actors situated in larger macro-structural processes.

Critical junctures create new mechanisms of positive feedback, which means that changes in positive feedback signal that a critical juncture has occurred. Positive feedback effects flow back to institutions, and subsequently reproduce and maintain them (Pierson 2004; Thelen 1999). Thus, positive feedback effects keep institutions on a particular path. Without these mechanisms of reproduction, institutions would not endure, as the latter are "embedded in a context that is constantly changing" (Thelen 1999: 396). Institutional stability, is not automatic, but dependent on reproduction. Feedback effects can be divided into two broad

groups, the first being coordination effects. Actors adjusting to institutions concomitantly reaffirm and uphold them (Thelen 1999: 392). Further specification is offered by Banchoff (2002), who notes that institutions give rise to actor constellations with vested interests in the survival of this institution (Banchoff 2002: 5-6). Given actors' limited resources, moreover, invested resources reduce the amount of resources available for backing reform efforts (Banchoff 2002: 3).[8] Invested resources could also contain sunk cost, i.e. start-up costs of adjusting to an institution, implying that switching in itself would entail additional costs. Thus, coordination effects represent increasing returns, and give rise to institutional stability: Organizations with vested interests and invested resources in institutions will defend these.

The second group of feedback effects consists of distributional effects of institutions, where institutions are not neutral, but rather have effects on the relative power relationship between groups: Institutions "reflect, and also reproduce and magnify, particular patterns of power distribution in politics" (Thelen 1999: 394). By structuring political conflict between groups, in which some are privileged and others not, institutions thus structure outcomes (Hall & Taylor 1996: 937-938). Moreover, "institutions distribute power unevenly across social groups" (Hall & Taylor 1996: 941), and over time these asymmetries can exclude or empower groups, with the possibility of the latter groups being able to institutionalize their upper hand by changing "the rules of the game…to enhance their power (Pierson 2004: 36). The result is institutions that can be seen as "enduring legacies of political struggles" (Thelen 1999: 388). This becomes self-reinforcing as powerful actors that over time change the 'rules of the game' to their benefit give rise to more asymmetry in relative power. Whereas coordination effects pertain to the interests of actors in relation to existing arrangements, distribution effects influence relative power. Thus, actors and their interests are endogenous to institutions (Thelen 1999: 375), because the constellations of actors as well as their interests are influenced by path-dependency.

With causal importance given to critical junctures, this perspective allows for the possibility that cause and effect can be separated by a long period of time, because the effects of early institutional choices can be long-term (Peters 2005: 71; Rosamond 2010: 111). This opens for the possibility that institutions can develop in ways that were neither foreseen nor desired by

[8] Banchoff includes a third factor, which relates to the effect of equating a practice with the definition of a policy-area, thus limiting the scope for change (Banchoff 2002: 5). While certainly compatible with historical institutionalism, this represents a more sociological vein, and is therefore not included in this more power-oriented application of the historical perspective.

the actors who made the initial choice, and for whom the outcome might represent an unintended consequence (Hall & Taylor 1996: 938; Rosamond 2010: 111). Consequently, history is not necessarily effective in producing functional and optimal institutions – institutions can be dysfunctional (Peters 2005: 79). Path-dependency structures the behaviour of organizations, thus limiting the scope for agency. The historical perspective thus differs from the power-oriented perspective's view of institutional outcomes as reflecting the logic of consequences.

Path-dependent change

Due to the described positive feedback effects, institutions remain stable. Positive feedback does not, however, mean that institutions are 'locked in' for all time (Pierson 2004: 52). On the contrary, institutional stability is intertwined with institutional change, because change occurs in path-dependent ways. As positive feedback reinforces the existing institution, incremental changes occur *within* a given path (Pierson 2004: 52). This has been referred to as "bounded change" (Pierson 2000: 76). The reason is that reinforcement entails more than mere maintenance, because the former strengthens a tendency, whereas the latter only retains it. Understanding the stability of institutions, then, is a criterion for understanding change (Thelen 1999: 399), and this stability is moreover explained by "the origins rather than the functions of the various pieces" (Thelen 1999: 382).

2.3.2 Contextual change

The second key theoretical step when analysing from a historical perspective is to place this path-dependent development in a greater historical context (Pierson 2000: 80). This is because path-dependency does not happen in a vacuum: "Where the context is changing, those who are invested in particular institutions re-evaluate their interests in light of these changes" (Thelen 1999: 396). Thus, contextual changes can affect the mechanism of positive feedback to the effect to strengthen or weaken these. While a crisis could shake the system, shifting developments to another path (Peters 2005), reform within related fields could trigger changes for the context of a path-dependent institution: "changes in one institutional arena can reverberate, provoking changes in other, complementary institutions" (Thelen 1999: 396). Contextual factors are macro-level changes in the economy, or meso-level changes within the energy sector.

Moreover, the impact of contextual changes depends on when in a path-dependent sequence they occur. It matters in which order events happen for subsequent developments, because their relative timing affects the interaction among them (Pierson 2004: 68-71). However, because a sequence "is *given* by the way in which social interactions unfold in time, rather than being something that someone *selects*" (Pierson 2004: 62, emphasis in original), the scope for agency is reduced: the order of events cannot necessarily be controlled by actors, yet it influences their behaviour. As a result, outcomes are also affected (Thelen 1999: 388).

Thus, while historical institutionalism has been described as less able to explain change (Peters 2005: 79), this thesis regards the influence of existing institutions as providing insight into change via the effects of feedback mechanisms on actors and their interests. Because an outcome is the result of critical junctures, actors that took the initial decision did not necessarily have this in mind when negotiating. Moreover, the temporal separation between cause and effect entails that the latter is not fully controllable by actors, in particular due to the feedback effects reinforcing the initially chosen path. Thus, institutional change is not fully controlled by actors, but rather subject to a path-dependent sequence of events resulting from a critical juncture.

2.3.3 Applying this framework on the EU

Because feedback mechanisms are specific to a given institution (Thelen 1999: 397), understanding change "requires an analysis of the *particular* mechanisms through which previous patterns were sustained and reproduced" (Thelen 1999: 399, emphasis added). This calls for an eclectic approach for studying "who has vested interests in particular institutions and what sustains these investments over time" (Thelen 1999: 398). A broader conception of actors may be required, because relevant actors are those directly affected by the institutional reform (these will also have vested interests) as well as those making decisions on institutional change and design, respectively.

Expectations from the historical perspective

From the historical perspective, resistance to change is expected. As a second expectation, however, change occurs according to the path set by an initial decision. This rests on the following sub-expectations: 1) The initial is decision was taken by actors that were influential *at this point of time*; 2) this decision triggered positive feedback effects, 3) positive feedback

effects caused path-dependency; 4) path-dependency eventually led to the adoption of the NC procedure in its particular form. Additionally, it is expected that larger historical processes affected the context that path-dependency took place in.

An initial decision is operationalized as a single or relatively small set of decisions made by the EU. These could be informal agreements or formal legislation. *Actors influential during the critical juncture* are those that held formal and informal power within EU legislative process at the time that the initial decision was taken. While a critical juncture is defined through the identification of different positive feedback effects during a previous period of time; *positive feedback* is operationalized as consisting of stated support of existing institutions by stakeholder orgenizations and major EU bodies (coordination effects: vested interests), amount of time, personnel and money used on existing institutions (coordination effects: invested resources) by stakeholders and major EU bodies, and formal influence of some stakeholder organizations and/or major EU bodies at the expense of others (distribution effects). Stakeholder actors are sub-national organizations (regulators, producers, transmitters of electricity) that participate in institutions pertaining to cross-border coordination on electricity. Major EU bodies are the Commission, EP and Council. *Path-dependency* is operationalized as incremental changes increasing the probability that the NC procedure would be enacted. *Larger historical processes* are operationalized as other reforms undertaken within the electricity sector in Europe.

2.4 Sociological institutionalism

2.4.1 Logic of appropriateness

The third perspective, sociological institutionalism, regards the shape, or design, of institutions as is the direct result of concerns for legitimacy. This perspective addresses the adoption of "specific sets of institutional forms, procedures or symbols" (Hall & Taylor 1996: 947) head-on. Thus, this perspective is considered to be of great explanatory value in accounting for the shape of institutions (Hall & Taylor 1996: 947; Tallberg 2010: 638): it traces the origins of a given institution's particular shape by looking to the role of norms and ideas (Tallberg 2010: 635). A norm can be defined as a moral guideline for expected social behaviour, and is closely related to legitimacy. Legitimacy, moreover, will shape institutions. This perspective has a broader understanding of institutions, seen as including "formal rules,

procedures and norms, but [also] the symbol systems, cognitive scripts, and moral templates that provides the 'frames of meaning' guiding human action" (Hall & Taylor 1996: 947). This thesis thus utilizes a combination of a more normative and a more cognitive understanding of institutions, although most emphasis is placed on the cognitive aspect rather than the normative, because legitimacy is seen as an imperative, something taken for granted, rather than something one 'ought to' comply with. When the term 'appropriate' is utilized, it is in this meaning.

Legitimacy is constitutive to institutions. Institutions, moreover, shape behaviour by offering normative templates for action or interpretation: "Institutions as systems of meaning do convey a sense of how their members should behave" (Peters 2005: 118). Hence, organizations and their behaviour alike are seen as guided by institutions that have an ideational basis. When organizations make institutions, then, the institutional design is directly shaped by a 'logic of appropriateness', rather than by a logic of consequences (March & Olsen 1989: 23)**.** Actors want to do "the right thing" (Börzel & Risse 2009: 10) rather than maximize own gains.[9] Institutional shape is seen as an end in itself, rather than a tool for realizing interests. As a result, this perspective admits actors less scope for agency as compared to power-oriented institutionalism, because actors behave according to factors outside their control. Similarly as within the historical perspective, interests and actors are seen as endogenous (Aspinwall & Schneider 2000: 7). As distinct from the previous perspective, however, is that "action is tightly bound up with interpretation" (Hall & Taylor 1996: 948): their behaviour reflects conceptions of appropriateness. This legitimacy is moreover found in the organizational field, a term that refers to "those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products" (DiMaggio & Powell 1983: 148). An organizational field can thus be compared to a sector or an industry. An organization will adapt to that which is considered legitimate within its organizational field (Peters 2005: 107), thus spreading a practice across this organizational field (Hall & Taylor 1996: 947).

[9] With rationality pertaining to the relationship between means and ends, this is contained in both logics of action. While the logic of appropriateness might direct attention to process-elements, this entails rationality in the sense that, given the goal of doing something the right way, behaving accordingly becomes a rational means to achieving *that* end.

2.4.2 Institutional legitimacy and diffusion

The institutions themselves are seen as stable and stabilizing. Once in place and perceived of as legitimate, institutions will be maintained and reproduced through action.[10] However, institutional change is also possible. Drawing on Selznick (1957), DiMaggio and Powell (1983) see this as resulting from concerns for legitimacy: Institutional change happens as new practices are adopted because they are perceived as enhancing legitimacy. New practices have normative aspects, and are thus not neutral. Legitimacy can thus give rise to stability as well as change. Due to the necessary delineation of scope, this thesis will not focus on the initial appearance of practices. Suffice to note here that this might be result from a demand-driven or functional process, where an institutional design develops in response to a specific problem (Scott 2008: 104). This can proceed as a self-reinforcing process of increasing adoption rates and legitimacy, respectively. Once perceived as legitimate, this spurs further adoption, which feeds back to enhancing the legitimacy of this practice. Practices are adopted by organizations because they are considered the appropriate way of doing things (Finnemore 1993: 575; Tolbert & Zucker 1983: 26), thereby enhancing legitimacy (Hall & Taylor 1996: 949).[11] Whereas initial appearance might be demand-driven or functional subsequent adoption is supply-driven.

This supply-side argument entails that changes in institutional design results from the *diffusion* of a solution offering a 'one size fits all'-practice to a variety of problems in different contexts (Scott 2008: 104). Diffusion is a "socially mediated spread of some practice within a population" (Strang & Meyer 1993: 487). The perception of legitimacy driving diffusion, however, is no individual evaluation, but rather reflects the view of the collective, in this case the organizational field. Thus, organizations change the institutional design according to collective conceptions of legitimacy (Tallberg 2010: 635). In this thesis, the imitation of pre-legitimized practices will be studied.

2.4.3 Carriers and mimesis

Carriers are vehicles that 'transport' practices, and the type of carrier can influence institutional change. In the following, two types of carriers are presented: symbolic and

[10] For a more detailed theoretical account of such a process, see Berger and Luckmann (1967).

[11] Such a solution-driven development could also be actively propagated by prior adopters (Finnemore 1993).

relational systems, respectively (Scott 2008: 70, 140).[12] *Symbolic systems* emphasize the interpretation of a practice. Categorization influences interpretation because the way things or ideas are understood is affected by how they are distinguished from one another. Referred to as decontextualization or theorization, this entails a process where some elements are emphasized and crystallized at the expense of others, thus removing a practice from its initial context to a more general level of abstraction through interpretation (Strang & Meyer 1993: 492). Moreover, the message conveyed from this abstract level is that "similar practices can be adopted by all members of a theoretically defined population, with similar effects" (Strang & Meyer 1993: 496). This facilitates diffusion because theorized practices at a higher level of abstraction are able to 'travel'. It should be noted that it is not the practice itself that spreads, but *its theorized version* (Strang & Meyer 1993: 499).

According to Strang and Meyer (1993: 500), theorization and rationality are closely interrelated, with the former drawing on the latter in order to specify the reasons as to why a given practice or idea should be adopted: "why the potential adopter should attend to the behaviour of one population and not some other, what effects the practice will have, and why the practice is particularly applicable or needed given the adopter" (Strang & Meyer 1993: 500). Moreover, theorized practices are regarded as effective in achieving desired ends (Strang & Meyer 1993: 488), thus supporting the perception of legitimacy.[13] As a 'rationalized myth' (Christensen, Lægreid, Roness & Røvik 2004: 67), effectiveness might nonetheless be fictional (DiMaggio & Powell 1983). This illustrates how symbolic systems can aid diffusion by way of *framing*, because this particular way of presenting a practice – as effective – facilitates a particular interpretation or response: the practice is regarded as legitimate and adopted. A final aspect belonging to symbolic systems is *bricolage*, which entails creatively combining elements from different sources (Scott 2008: 140-142). Thus, legitimized templates for institutional design that are regarded as valid and applicable as solutions within different contexts are diffused.

Relational systems make out the second group of carriers, where practices are diffused via social relations. Here, the *shape* of the relationship between prior and potential adopter matters. This can be relations among "among individuals, groups, and organizations" (Scott

[12] Scott presents two further carriers not treated here (routines and artefacts).

[13] This differs from a more functionalist account in which changes would occur because they do in fact increase effectiveness and/or efficiency (Strang & Meyer 1993: 488).

2008: 142) that are "members of a social system" (Rogers cited in Strang & Meyer 1993). Practices are more likely to be diffused between organizations that resemble on another in the sense that they are seen as having "common cultural ties" (Strang & Meyer 1993: 487), and thus as "falling into the same category" (Strang & Meyer 1993: 490). Such categories are collective social constructs that facilitate diffusion (Strang & Meyer 1993: 491). A group of such organizations constitutes an organizational field: organizations adopt legitimized practices from within their own organizational field, imitating those that they perceive as similar, and as "more legitimate or successful" (DiMaggio & Powell 1983: 152). This is particularly relevant in the face of uncertainty (DiMaggio & Powell 1983: 151), policy failure or dissatisfaction with the status quo (Börzel & Risse 2009: 12).

There are several ways that diffusion can occur, one of which is *mimesis* (DiMaggio & Powell 1983).[14] This entails a process in which a potential adapter imitates – copies – a prior adapter. Finnemore criticises this for describing the how, but not the why, of diffusion (Finnemore 1993: 592). Moreover, it is criticised for being "an unmediated process; it locates the impetus for imitative actions in the imitator" (Finnemore 1993: 592). However, if combined with the carriers from the relational and symbolic systems – common cultural ties and theorization, respectively – mimesis is given more explanatory weight, and the impetus for imitation can be seen as existing within the organizational field rather than located within the individual organization that imitates. This illustrates that imitation is heavily influenced by the logic of appropriateness, entailing a more cognitive aspect as well in the sense that the adoption of practices might reflect orthodoxy (Scott 2008: 51). As such, while it might be rational to learn from the experiences made by others (Strang & Meyer 1993: 489), imitation does not reflect a rational *choice*, but rather a cultural imperative.[15]

This has been characterized as *convergent change*, because it supports and strengthens practices already present within an organizational field (Scott 2008: 133). However, as practices travel, innovation can be introduced. Emphasizing that practices can change as they are transmitted to other contexts, innovation can also occur as practices are 'translated' to a new context (Christensen et al. 2004: 85). How the 'end-user' makes use of a practice can also be innovative (Scott 2008: 133). Moreover, by imitating multiple practices

[14] Other mechanisms mentioned are normative and coercive diffusion (DiMaggio & Powell 1983).

[15] Experiences would nonetheless be interpreted in a social context, and it is not given that the link between cause and effect is recognized by actors.

simultaneously, thus combining different models in a bricolage, a new institutional design can appear. As a result, there is no necessary contradiction between imitation and innovation.

Consequently, different institutional arrangements are not just regarded as means to achieve an end, but seen as ends in themselves, because certain ways of doing things are regarded as more appropriate than others. Institutions will change when conceptions of legitimacy change. For institutional design, this entails that specific institutional features are realized because they are regarded as legitimate. Consequently, the possibility for individual organizations to actively change institutions is therefore limited, because changes in institutional design reflect collective perceptions of legitimacy diffusing through the organizational field.

2.4.4 Applying this framework on the EU

Expectations from the sociological perspective

The procedure for developing network codes was enacted in its particular form because this was regarded legitimate. The particular contents of the procedure imitate theorized practices found and positively evaluated within the organizational field of those organizations making changes to the institutional shape of the procedure. Due to the Commission's role in drafting legislation, it is expected that its organizational field was of particular importance.

Uncertainty is operationalized as statements and references by organizations involved in making EU legislation that they are not sure as to what means could achieve the desired goals, or the provision of multiple viable alternatives. *Policy failure and dissatisfaction* are both operationalized as statements and references made by these organizations that the existing practices are illegitimate, insufficient, wrong or inappropriate etc. *Common cultural ties* are defined as existing within an organizational field. The *organizational field* of the unit (Directorate-General for Transport and Energy) within the Commission responsible for drafting the proposal is operationalized as other Commission units as well as other organizations within the energy sector. For Parliament, its field consists of Eurogroups – EU-level non-governmental organizations and business groups respectively – and transnational networks gathering national public actors. The organizational field of Council is national governments. A *legitimized theorized practice* is operationalized as statements and references that in generic terms describe the way other organizations within the same organizational field do things. Moreover, the practice is described by an organization as applicable for itself.

2.5 Institutions and institutional change

In this chapter's final section, an elaboration of the relationship between institutions and institutional change within the three perspectives is offered. The perspectives have differing definitions of institutions, as well as different conception of how these can influence actors – and thereby affect outcomes. The power-oriented perspective tends to view institutions as formal rules that specify conditions for access to – and participation in – decision-making within formal organizations, thus regarding actors and their interests as exogenous to institutions. The historical perspective, while also defining institutions as formal rules and organizations, are more concerned with the positive feedback effects from initial choices that affect institutions and actors alike. The sociological perspective is different in that actors are considered less important, because the logic of appropriateness drives behaviour. Legitimacy, moreover, is seen as a collective construct rather than reflecting the view of an individual (actor). That which is considered legitimate is less of an individual view, and more one of collectives. Institutions, then, are perceived as consisting of "values and cognitive frames" (Peters 2005: 116) that could be informal or have been formalized in e.g. rules or organizational structure.

This has implications for the perspectives' respective understanding of institutional change. As the power-oriented perspective regards institutions as formal rules, institutional change is here explained by the rational behaviour of those actors with a formal say in the decision-making. If these actors have an interest in changing (or establishing) an institution, they will act instrumentally on this preference to change the institution, an outcome that will ensue subject to sufficient support among actors. The historical perspective, on the other hand, studies how an initial decision can constitute a critical juncture by triggering path-dependent institutional development, which eventually leads to an outcome. Thus, the causes of institutional change can have long roots. The final and sociological perspective explains institutional change by looking at how models perceived as legitimate are imitated. Thus, despite diverging – yet not entirely different – understandings of what an institution is and how it influences outcomes, all three perspectives allow for the possibility that institutional change can result in a formal rule or procedure.

What does this entail for the possibility of actors to engage in institutional design? The power-oriented perspective regards this as fairly high, limited only by the need for agreement, i.e. the need to make compromises. The historical perspective sees scope for agency in the

initial design, but because this can develop in ways unanticipated and unintended outcomes by the actors, this entails a substantial limitation to the possibility for organizations to engage in institutional design. The sociological perspective does not really see scope for action, because organizations simply imitate more legitimate models, but unintended innovation can result from combinations.

In this chapter a theoretical framework for analysing the observed change was presented. In the following chapter, the methodological implications of the theoretical framework will be discussed.

3 Method

The nature of the research question and of the theoretical framework – already presented in previous chapters – has implications for choice of research design (Gerring 2007: 71). The purpose of this chapter, then, is to present the method for how sources for data were located, and how data was collected and treated in order to answer the research question. At the end of the chapter, then, the foundation for making inferences from the data will be discussed by evaluating the validity and reliability of the research design (King, Keohane & Verba 1994).

3.1 Choice of method

Research question: Why was the procedure for developing common cross-border network codes enacted in its particular form?

As indicated by the research question, the research objective is to explain the change in a specific procedural rule. Causal factors were presented in the theory chapter. During the course of the empirical study, then, two things had to be clarified: 1) are the assumed causal factors present? 2) Is there a causal relationship between these and the change of the procedural rule?

The first question was addressed by means of the congruence method (pattern matching), a case study approach for comparing the consistence between the theoretical and the empirical world (George & Bennett 2005: 181). A case study approach is "a detailed examination of an aspect of a historical episode to develop or test historical explanations that may be generalizable to other events" (George & Bennett 2005: 5).

Pertaining to the congruence method in particular, this entailed looking for correspondence between the causal factors and the outcome of interest. Theoretically deduced expectations were presented in the previous chapter. As the outcome (the observed change) was already known, attention was drawn to theories explaining this change, with expectations formulated in rather deterministic terms: given the presence of a factor, institutional change will ensue. Thus, the three perspectives offered complementary explanations as to why the change occurred, yet drew attention to different aspects pertaining to this change. This was treated more extensively in chapter 2, suffice to note here that the purpose was to explain as much as

possible of the matter at hand, and that in the case of contradictory findings that are mutually exclusive, this must be evaluated qualitatively.

Ascertaining congruence between the causal factors and the change of the procedural rule, however, would not have been sufficient, as it must be established whether there was a causal mechanism between these (Gerring 2007: 71). Process-tracing was utilized to address this concern, as this approach seeks to uncover the mechanism linking causal factors to outcomes (George & Bennett 2005: 206). Considering not only the presence of the specified causal factors and, fast-forwarding to the outcome, the change of a procedural rule, process-tracing also carefully analyses the steps in between. In this thesis, this was be done by means of a 'detailed narrative' in which the course of events was presented (George & Bennett 2005: 210). This reduced the risk of spuriousness – a situation in which the assumed causal factor and the outcome are both actually caused by another factor not taken into account – as the narrative allowed for a consideration of potential factors not expected by the theories (George & Bennett 2005: 188).

Finally, an inquiry into whether or not a causal factor is a necessary (and/or sufficient) condition for the outcome was required (George & Bennett 2005: 185). Limited time and resources prevented the consideration of a wider, comparable set of cases for similar or different patterns. However, in-depth knowledge of the case – attained through careful analysis of the process – formed the basis for an analytical assessment of the probability of a situation in which either causal factors or the procedural rule would have looked differently (discussed in the analysis chapter). Specifically, this posed the question of whether or not the outcome could have ensued *without the presence* of the assumed causal factor(s); and whether or not a different outcome could have occurred *despite the presence* of the assumed causal factor(s) (George & Bennett 2005: 189-190).

3.1.1 Choice of case and contribution to theory

This study was motivated by an interest in explaining an observed empirical change (Lijphart 1971: 692). With a research objective of revealing why the formal change in this particular case occurred, it was quite relevant to study the specific case (George & Bennett 2005: 83). As a case in the "everyday language" sense (Geddes 2003: 137), it was studied over time, thus increasing the number of observations. These relate to the situation prior to the change (before

the initiation of the legislative process for a Third Energy Market Package), during (during the legislative process), as well as after the change (assessment of the outcome).

The selection of this case, then, is substantially reasoned rather than representatively sampled, and as such cannot yield a statistical generalization. Nevertheless, every case study should have an interest beyond explaining the empirical phenomenon at hand (Gerring 2007: 20). The ambition should be to contribute to theory. In the absence of cross-case comparisons, however, even contingent generalizations, limited in scope to a subclass of phenomena under certain conditions (George & Bennett 2005: 75-76; Gerring 2007: 76), cannot be made. The reason for this is that a case study is usually not a sufficient basis for proving or discarding a perspective (whose expectations have been confirmed or rejected, respectively).

As a building block, however, a single case study can provide useful information for future research. Thus, lessons learned for studying institutional change is will be presented in chapter 6. Despite not being able to be used as a basis for making contingent generalizations, separate case studies – that by themselves did not represent a sufficient basis for making generalizations – can be tested on other, comparable cases within the same universe. Defined in analytical rather than statistical terms then, the universe is a function of the research question (George & Bennett 2005: 69; Yin 2009). This study focuses on the particular transformation occurring in the regulation of cross-border electricity exchanges, and is studied as a case of a change of a procedural rule. Moreover, applying theoretically derived expectations on a specific case can also help refine theory. Utilizing different perspectives, scope conditions and nuance of these (in comparison to each other) can be identified (George & Bennett 2005: 115). Thus, the study can provide further specification of different streams of institutional theory.

3.2 Sources for data

The outcome to be explained is a change of a procedural rule – a formal legal change. Thus, data from official documents pertaining to the formal legislative process within the EU should be included. In order to study the unfolding process, data covering the span of this historical period (2005-2009 in particular) must be gathered. Such processes are well documented in public records, thus providing a viable source for data. Additionally, the interaction among affected parties, and their responses to events and steps of the process leading up to the final

decision on the Electricity Regulation (as part of the third legislative package) will be studied. On the positions of actors, position papers and press releases can be utilized.

Relevant media coverage will be utilized for contextualization, complemented by semi-structured interviews with elite informants that participated in or closely observed the process leading up to the 2009 decision. The latter will be invaluable for a more substantial insight to the process, including the less formal steps.

3.2.1 Qualitative document analysis

Written documents were assessed systematically through qualitative document analysis (Bowen 2009: 27). Documents utilized here were public records, position papers and newspaper articles were assembled "without a researcher's intervention" (Bowen 2009: 27), and the analytical task consists of "finding, selecting, appraising (making sense of), and synthesising data contained in documents" (Bowen 2009: 28).

Data from public records and documents

The Legislative Observatory – cross-checked with the PreLex database – was used to identify relevant documents pertaining to the legislative process, thus concentrating on public records from the major EU bodies (Commission, Parliament, Council), leaving out others, like ECOSOC, CoR, ECJ, national institutions (although including some member state position papers submitted to the Council).[16] Older EU documents were retrieved from the Archive of European Integration.[17] Position papers were retrieved from the respective organizations' websites.

The advantage of using public records was that they thoroughly documented the process, from the legislative proposal (with an explanatory memorandum attached) presented by the Commission, to preparatory documents by *Coreper*; to minutes, declarations and press releases from EP and Council meetings, along with reports and legislation decided on. Drawbacks however included watered-down documents presenting a picture in which conflict

[16] Legislative Observatory is the European Parliament's database for monitoring the EU decision-making process: http://www.europarl.europa.eu/oeil. The Commission's PreLex database serves a similar purpose: http://ec.europa.eu/prelex/apcnet.cfm?CL=en

[17] The AEI is hosted by the University of Pittsburg, and found here: http://aei.pitt.edu/

of interest is often played down at the expense of consensus. Moreover, not everything is written down, and the selection of content to be recorded for publication might be subjected to negotiations (Council records in particular). However, comparing data from different sources (other documents, as well as other kinds of sources, like media and interviews) provided a check.

Data from media coverage

Additionally, relevant media coverage was used for contextualization of above-mentioned official documents, providing information on coinciding events, processes, and linkages between these. Moreover, the electricity sector responses to the different steps in the legislative processes taking place within the EU were also found from this source in addition to through, or in the absence of, public records or position papers. Moreover, journalists often seek to portray issues in a (possibly exaggerated) conflict dimension, and thus provided a useful corrective to official documents.

Given temporal restrictions, the online news portal *EurActiv* was utilized, with some additional articles from other newspapers. This was a practical and pragmatic choice, with only minor implications for validity since this general source for data was not given as much weight as public documents and interviews. Relevant articles were located through search for key words, and available thematic dossiers on EU energy policy were also utilized. Articles related mainly to the period 2006-2008, thus providing contextualization to the formal legislative process within the EU on the Third Energy Market Package.

3.2.2 Semi-structured interviews

Written sources were complemented by qualitative interviews. Elite informants were chosen as data would be needed from individuals that had participated in or closely observed the process leading to the outcome. Moreover, with public records in the EU often oriented towards attaining consensus, informants were seen as able to provide useful information on diverging views and interests.

Informants were selected on the basis of their organizational affiliation, notably, in terms of organizations having participated or closely followed the legal process within the EU. Snowball sampling was also utilized (Biernacki & Waldorf 1981: 141). Asking key

informants to suggest further informants proved a useful approach for checking whether the interviews already conducted (or planned) were appropriate. Scholars within the field were also conferred on the matter. This is thus a controlled sample. With the need to talk to specific individuals, a randomized selection of informants was not a viable option.

Given limited time and resources, it was regarded most important to talk to representatives from the formal EU institutions (Commission, EP, Council), as well as from organizations of the kind that were given major roles in the procedure of developing network codes. The latter included TSOs, market actors and national regulators or, alternatively, their associations.

Representatives from the Commission, a TSO, ETSO, EURELECTRIC and a representative from a national delegation were interviewed.[18] The informants had different relations to the course of events being studied in this thesis. Two had not followed the at the time unfolding process as closely, and as a consequence, provided less information on this. They did however provide insightful assessments of the outcome as well as on the nature of network codes (technical/political; cross-border/affecting national). The other three had however been centrally placed, all of which were still involved in related processes. This was positive in getting their assessment of the outcome as well as their preliminary experiences with the on-going development of network codes.

By interviewing informants with different organizational affiliations, different views could be compared. Therefore, a standard set of open-ended questions were utilized, with planned follow-up questions and probes. This allowed for standardization – making comparison easier – with the needed flexibility that allowed for the insider's view. The interviews were conducted in English and Norwegian. Quotes were checked by the informants in order to reduce the possibility of misunderstandings as well as (where relevant) to avoid misrepresentative translation. The interview guide is found in the appendix.

Informants' memory was a potential issue, with implications for validity and reliability (Andersen 2006). This was indicated by informants at a few occasions hesitating,

[18] Requests to individuals represented (at the time) in Parliament were sent, but did not result in an interview. Interviewing representatives from the Council configurations having assembled at the time were moreover beyond the limits set by time and resources. Positions and processes of both institutions were fortunately available in public records. Due to limited time, no formal interview with a national regulator was conducted, yet the positions of their associations were well documented through position papers and press releases, as well as being well given much attention by other informants. Due to limited time and resources, other stakeholders were also not interviewed, notably traders, (large) consumers, power exchanges, environmental groups.

remembering only roughly when a given step in the process had occurred. In general, however, informants were able to recall the course of events with impressive detail – less surprising, perhaps, as several were still working with matters tied to these developments, thus keeping the matter fresh in memory. Moreover, some of the informants had been working rather intensively on these issues at the time, which too could have been expected to have had a positive effect on their recollection. The temporal dimensions also made it less likely to suspect informants of withholding information – the questions mainly related to the period 2005-2008. Informants provided rather exhaustive replies to answers, and spoke rather openly on most aspects.

A recurrent issue in interviews, positive self-representation (Berry 2002: 680), might have occurred, but this is corrected through interviewing informants providing accounts from different perspectives, as well as by using data from other kinds of sources. Further, informants are not obliged to tell the truth (Andersen 2006; Berry 2002), and could also have had an interest in portraying the course of events in a particular way – especially as the actual process of making network codes is an on-going process. This, however, is not necessarily a disadvantage. On the contrary, getting perspectives that differ due to different interests provide useful insight. Moreover, this information can be compared to data provided by other informants as well as by other sources, such as public records and media coverage, thus strengthening validity.

As data would be gathered from individuals, the study was reported to the Norwegian Social Science Data Services (NSD). Informants were contacted by e-mail in advance, and given a broad presentation of the project as including the purpose of conducting an interview. Also provided was a rough description of the interview (shape and content), and a note on how (long) the data would be stored and used. All informants were offered the possibility of anonymity, and no names were included in the transcribed documents.[19] Entailing a slight departure from the ideal of transparency, then, informants were referred to as representatives of their (former) organization. Moreover, protected by anonymity, informants were able to talk more freely, and provided exhaustive answers to my questions.

[19] As some informants wished to remain anonymous, this treatment was applied to all informants in order to ensure equal treatment – also due to the fact that the group of people involved in these processes was limited, thus making it easier to identify those who wished to remain anonymous once others (who would be named) were eliminated.

Subject to informant's permission, the interviews were tape recorded. Additionally, notes were taking. One interview was not recorded, with the potential loss of detail being compensated for by the informant speaking rather freely on sensitive issues. Moreover, interviews were carried out within a relatively short time span, and transcribed afterwards. Finally, informants were given the option of reading through quotes intended for use, which also helped reduce the potential for misunderstandings and inaccuracies, with positive implications for validity – despite the risk of informants withdrawing quotes.

3.3 Evaluation of the research design

Using multiple sources for data (interviews, documents, media) allowed for balancing potential biases, as well as by providing a stronger basis for making inferences, thus improving validity and reliability (Gerring 2007) Most attention was given to primary sources (public records) and interviews (with most weight given to first-hand accounts) in order to avoid bias in terms of interpretation often attached to secondary sources (George & Bennett 2005: 90). Moreover, all sources of data were approached seeking to trace the process, i.e. in search of collecting data of the various steps of the development occurring over time. Care was taken in comparing the 'story' of the process as told by one informant with that articulated by other informants, as well as reports from the media and the 'official version' described by public records. In case of contradictory accounts, this was evaluated on a case-by-case basis, with some aspects being subjected to further discussion in the analysis chapter. To a large extent, the different sources rendered a similar story, thus enhancing validity and reliability.

Validity is important because it addresses the question of whether the data gathered can be used to say something about the research question: "Validity refers to measuring what we think we are measuring" (King et al. 1994: 25). The research design applied in this thesis required an assessment of internal validity as well as construct validity (Lund 2002: 104).

Internal validity refers to whether or not the inference of causality between the expected factors and the outcome of interest is valid (Lund 2002: 104). While different expectations from different streams within institutionalist theory were utilized, time and resources limited the use of further expectations, which consequently leaves some uncertainty related to the inferences made as regards internal validity. However, as mentioned earlier in this chapter, process-tracing by means of a narrative allowed for an inquiry as to whether or not the

outcome was caused by the expected factors. Moreover, this could also capture omitted factors, i.e. those not expected by theory, and reduce the threat posed by spuriousness.

Construct validity refers to the operationalization of theoretical concepts to empirical indicators that can be measured (Lund 2002: 104). Operational indicators were presented in chapter 2, and while different operationalizations could have been made from general terms the indicators seem to capture the theoretical concepts. For critical junctures in particular, the operationalization here differs from other uses, because it proceeds via the operational indicators for positive feedback. However, as stated in chapter 2, defining a critical juncture as single or a set of decisions taken in a time where the institutional constraints are relaxed (Capoccia & Kelemen 2007) or periods of major change (Collier & Collier 1991) is problematic because it cannot be taken for granted that this is the juncture that triggered new positive feedback. Although indirect, using changes in positive feedback to identify a critical juncture is a useful approach because it highlights and capitalizes on the interrelationship between the two.

A study displays *reliability* to the extent that other researchers should be able to get the same results by using the same method (King et al. 1994: 25). Therefore, care was taken to describe the method for gathering and treating data utilized in this thesis. Where possible, moreover, data was gathered from sources like official records and media coverage available online, thus facilitating replication of the study. Replicating the social dynamics in an interview is more of a challenge, but the questions asked are available in the interview guide (see annex). The anonymity of informants is also a complicating factor, yet this trade-off was deemed necessary due to ethical considerations, and mitigated somewhat by referring to informants' organizational affiliation. As interpretation played a role in the handling of data in the research design applied in this thesis, absolute reliability is not possible. However, care was taken in separating the presentation of the empirical data from the analysis conducted on the basis thereof.

4 Empirical inquiry

In this chapter, the course of events leading up to the formal decision on the procedure for network code development will be presented in chronological order. Starting with a brief historical backdrop, this is followed by a presentation of the previous two energy market packages as well as previous cooperative schemes, before moving on to the early EU discussions of a third package, leading up to the Commission's proposal for the Electricity Regulation in September 2007. Here, a closer look will be taken at the proposed NC procedure within this proposal, going more in detail as to the Commission's reasoning of the steps thus suggested. Then, I will look into the legislative process through which amendments of relevance to the NC procedure were made before the presenting the final version of the procedure adopted in 2009.

4.1 Pre-liberalisation

There is a long history of energy being linked to the EU project, starting with the European Coal and Steel Community and EURATOM, but little competence had been delegated to the supranational level within this policy area. As general economic EU law developed, pertaining to the free movement of goods and services, the electricity and gas sectors, respectively, were shielded from this (Wasenden 2008: 33). In post-war Europe, security of supply was a major concern (UCTE 2009). Electricity and gas were treated as 'special' due to their strategic importance for economic development in general (sufficient and stable supply of energy is an important factor), but also, and, perhaps more importantly, due to particular traits: both depend on costly infrastructure – with networks constituting 'natural monopolies' – and are highly expensive to store, making *instant usage* neccessary. As a result, ensuring constant balance between production and consumption of electricity and gas, respectively, was – and arguably still is – *the ultimate task* of actors responsible for operating national networks.

Prior to liberalisation, the situation pertaining to electricity in Europe was one of separate national markets, each of which usually was dominated by a vertically integrated company, with a large extent of state ownership (Squicciarini et al. 2010: 1). Vertically integrated companies – major companies whose activities included the entire value chain from production to transmission to customer supply – were predominant in the electricity sector,

with customers often without a choice as to which company they would get their electricity from, but where the companies in many cases had ‘public service’ obligations.

The amount of cross-border electricity exchanges was relatively low, but conducted with the aim of improving energy supply, with cooperation among vertically integrated companies “focusing more on system security and on the efficient use of generation resources than on genuinely commercial objectives” (Squicciarini et al. 2010: 1). In Continental Europe, for instance, the *Union for the Coordination of Production and Transmission of Electricity* (UCPTE) had been established as early as 1951, by France, West-Germany, Belgium, Switzerland, Luxembourg, Italy, Austria and the Netherlands. Engaged within this organization were vertically integrated companies with production and transmission activities. Moreover, cooperation within UCPTE dealt with issues of ensuring secure supply of electricity, an important factor in rebuilding Europe after World War 2 (UCTE 2009: 11). Over time, UCPTE was extended to include other parts of Continental Europe. In a similar vein, vertically integrated companies in the Nordic region had been cooperating within *Nordel* since 1963 (Nordel 2009: 4). Also representing the interests of vertically integrated companies were the *Union of Producers and Distributors of Electricity* (UNIPEDE) whose roots stretched back to 1925 (UCTE 2009: 8), and *EURELECTRIC*, founded as aBrussel-based lobby group in 1989 (Jabko 2006: 105)

Energy was regarded a utility, and competition was low (Wasenden 2008: 33).This, however, started changing during the course of the 1990s and onwards, cf. figure 2.

	EU developments	Cross-border electricity exchanged (TWh)
1988	Commission launches internal energy market	138,6
1990		170,9
1992		168,2
1994		170,2
1996	1st package: 1st Electricity Directive	221,7
1998	1st package: 1st Gas Directive	
	Florence Forum	232,7
	ETSO (1999)	
2000		297,3
2002		332,0
2003	2nd package	
	ERGEG	
2004		342,5
2005	Hampton Court	
	Sector inquiry launched	
2006	Commission green paper	383,2
2007	Jan: Commission communication on IEM	
	Jan: Sector inquiry final report	
	Mar: Spring Council meeting	
	Sept: Commission proposals for 3rd package	
2008	Council reading	376,4 TWh
	EP reading	
2009	Decision on 3rd package	

Figure 2: Internal energy market development over time. Data on cross-border electricity exchange are from ENTSO-E (2010: 17).

4.2 Dawning liberalisation efforts (1986-2004)

4.2.1 Early steps from above and below

Since the decision on the Single European Act in 1986, which launched a large initiative for general market integration in Europe, talks on energy market integration had taken place within the Council (Eikeland 2011a: 17). In 1988, the Commission proposed an internal energy market (Communities 1988). The Commission used the momentum gained from the general single market initiative, as well as on the early experience with UK energy sector liberalisation; and was supported by the UK (McGowan 2011: 200). According to Pollak et al. (2010: 78), the launched idea of an internal energy market was also indirectly influenced by the high prices experienced during the oil crisis of the 1970s.

Route to the 1st legislative package

EU internal market policy thus formed a starting point for the thinking around an internal *energy* market. The Commission wanted to liberalise the electricy sector by deregulating and opening up markets and networks to competition (Pollak et al. 2010: 80). This included integration across borders. In terms of measures, then, the Commission tried to facilitate market integration and liberalisation via the single market principles of free movement of goods (Buchan 2010: 360; Pollak et al. 2010: 79). The route via single-market powers was sought in part due to the lack of an explicit treaty basis giving the EU competence to legislate on energy matters (Squicciarini et al. 2010: 1).[20]

Inspired by the successful utilization of competition law within the other 'utility sectors' like telecommunications and civil aviation sectors (El-Agraa & McGowan 2001: 301), the Commission nonetheless had to reduce its ambition due to member state opposition. Consequently, the legislative route taken required unanimous consent by the Council as well as consulting the European Parliament (Eikeland 2011b: 249). On this route, however, the Commission's proposals were met by resistance by the member states (Pollak et al. 2010: 80). After experiencing its proposals being either rejected or heavily watered-down by the

[20] With the Lisbon Treaty the competence of the EU to legislate on energy has been expanded, cf. article 194 (EU 2008).

Council, the Commission opted for a more bottom-up strategy entailing extensive negotiations with national representatives and experts within working groups. Eventually, following repeated negotiations between in particular the Commission and Council, this brought about the first legislative package, with an electricity directive passed in 1996, and a gas directive passed in 1998 (Eikeland 2004: 5; Wasenden 2008: 34).

1st package: early deregulation and unbundling of accounts

The two major changes included in the first electricity directive were different varieties of third party access to transmission networks, and unbundling of accounts (requiring an intra-organizational separation between network operation, and the commercial market activity constituted by producing and supplying electricity) (Wasenden 2008: 34-35). Moreover, a deadline for market opening – in terms of competition – was set, from which point in time both producers and consumers of electricity could "negotiate purchases and sales of electric power" (Wasenden 2008: 34).

This package did not bring about major changes, and "resulted in only minor commitments from Member State governments" (Eikeland 2011b: 249). Notably, while seeking to remove exlusive rights to produce and transmit electricity, thus extending market liberalisation somewhat, the provisions included in the two directives left a large scope for member states to decide measures in their own pace (Eikeland 2004: 6). Regarding third party access – providing commercial actors witout network ownership *access* to engange in cross-border electricity trade – for instance, several options were available, spanning from negotiated or regulated third party access, to the single buyer model (Hauteclocque & Talus 2011: 2).

The first package represented "a compromise between countries that had started liberalization and those that contemplated it as a very remote possibility" (Trillas 2010: 71). By the time the first package was passed, some countries had already taken liberalisation a step further: "the United Kingdom, Sweden and [EEA member] Norway had already liberalised their markets to an extent wider than that required by the [Electricity] Directive" (Wasenden 2008: 34).

However, the directives contained provisions allowing for further inquiry into barriers to establishing an internal energy market (Eikeland 2004: 7). Thus, the Commission continued its work on identifying shortcomings (and their remedies). While working on amending the directives, then, the Commission also carried out benchmarking and evaluations of existing

legislation and the implementation thereof. Moreover, it focused on "cross-border physical and tariff-based barriers to trade" (Eikeland 2004: 8).

Own associations for transmission system operators

In addition, the Commission sought to make its bottom-up strategy for reaching agreement on measures for energy market integration more targeted by establishing the Florence Forum in 1998. This provided a meeting place where attendees from the electricity sector – representing national regulators, national governments, TSOs, traders, utilities, large consumers and consumer associations, power exchanges as well as from the Commission itself – assembled regularly for deliberations (Eikeland 2004: 8).[21]

In addition to meeting within the Florence Forum, TSOs also assembled within their own *TSO-specific* organizations. In 1999, UCPTE was redefined as an association of TSOs, taking the name *Union for the Co-ordination of Transmission of Electricity* (UCTE) (UCTE 2009: 35). By 2009, UCTE would have 29 TSOs from 24 countries as its members (ENTSO-E undated-b), with approximately 8 people in the secretariat (ETSO interview). Cooperation within UCTE dealt primarily with the more technical issues, such as system operation (Commission 2007a: 52).[22]

During this period, cooperation within UC(P)TE was deepened: In 1991 agreement on an operational handbook – laying down common principles for network operation – was reached, with subsequent revisions undertaken during the 1990s (UCTE 2009: 34). Through negotiations, the UCTE TSOs agreed on and revised voluntary rules and recommendations (interviews ETSO, Commission). This work would continue in the early 2000s.

Having taken steps during the 1990s in line with the early liberalisation within the Nordic region, Nordel became a *TSO* organization in 2000 (Nordel 2009: 4). Although limited in its geographical scope, the Nordic cooperation was rather extensive, focusing on the more technical system operation *as well as* market issues and infrastructure investment planning (ETSO interview). Cooperation within Nordel was less formal than within UCTE. This was in

[21] An equivalent forum for gas was established in 1999 in Madrid.

[22] I.e. transmission system operation, or grid operation.

part due to the countries having much in common in terms of culture and language, yet even so, the style was more casual (ETSO interview).

Other *regional* TSO associations existed, some of which were noted to be less substantial (UK and the Irish isle), and others that cooperated closely with UCTE, eventually becoming integrated into the synchronous UCTE zone (Eastern Europe and the Baltic countries).[23]

In 1999, following encouragements from the Commission on facilitating consultation (Buchan 2010: 366), the *European Transmission System Operators* (ETSO) was established with regional TSO organizations as its founding members,[24] becoming an association with direct TSO membership in 2001. At the time, 32 TSOs representing 15 EU countries as well as Norway and Switzerland were members of ETSO – by 2009 another 8 TSOs had joined (ENTSO-E undated-a). Thus, as a *European* organization, ETSO had a wide geographic scope. Its scope in terms of cooperation was, however, more or less limited to market questions (ETSO interview). Moreover, a Commission informant described ETSO as a "typical lobbying organization," which concentrated on monitoring EU legislation. A former ETSO representative noted that ETSO's secretariat consisted of three people.

Summing up the 1990s

During the 1990s, early steps were taken by the EU to facilitate liberalisation of the European energy sector, with developments occurring faster in some member states and slower in others. The Commission suggested a number of liberalisation measures to facilitate competition, but many of these did not pass through the Council due to a lack of agreement among the member states. A first legislative package was passed, leaving member states with a large scope for action (or inaction), yet two further strategies were utilized by the Commission: on the one hand, the first package allowed the Commission to continue to monitor developments and barriers; and on the other hand, the Commission sought to address the electricity sector directly through the newly established Florence Forum, as well as encouraging TSOs to cooperate on a European level through ETSO. Moreover, sector

[23] ENTSO-E has 6 regional predecessor organizations: UCTE (Continental Europe), Nordel (Nordic countries), BALTSO (Baltic countries), UKTSOA (UK TSOs), ATSOI (Ireland and Northern Ireland) and CENTREL (Eastern European countries). Since the mid-90s, UCPTE and CENTREL were synchronized (UCTE 2009: 35).

[24] ETSO was founded by ATSOI, UKTSOA, Nordel and UCTE.

associations were redefined as associations among TSOs, as opposed to the previous combined production and transmission associations. With liberalisation developing at an uneven pace across Europe, members of these TSO associations were in some cases companies with transmission acticities only, whereas others members were vertically integrated companies.

4.2.2 Strengthening EU legislation, deepening TSO cooperation

In 2001, a Commission benchmarking report called for further legislative action by the EU regarding the internal energy market, due to lacking implemention of existing legislation by several member states, but also due to increasing market concentration (Eikeland 2004: 8). More detailed EU legislation was called for, thus introducing EU Regulations which would apply directly, in addition to revising the existing directives which would have to be transposed into national law by member states (Eikeland 2004: 8-9).

2nd package: legal unbundling, regulatory oversight, cross-border networks

Subsequently, in 2003, a second package was passed by the EU, amending the two directives on electricity and gas, respectively, as well as introducing two regulations – one on electricity networks, and one on gas networks. The amended directives contained provisions on market opening within specified deadlines, and required legal unbundling of vertically integrated companies (separating production/supply tasks and network tasks into separate entities).[25] Moreover, having an independent energy regulator in each member state now became mandatory (Eikeland 2004: 9). While a lower limit was set for the power of national regulators, practices varied across the member states. A common feature, however, was a national orientation – legally imposed – of these regulators (Buchan 2010: 366-367). Most regulatory competence remained at the national level, causing a 'regulatory gap' at the European level (Eberlein & Grande 2005; Vasconcelos 2005).

In addition, an Electricity Regulation was introduced.[26] This regulation laid down the specific rules for cross-border electricity networks, with guidelines part of the regulation and in an

[25] E.g. by placing networks in a subsiary to the company (Buchan 2010: 361).

[26] Regulation (EC) No 1228/2003 (EU 2003).

attached annex, which were subject to further deliberations within a regulatory committee. In the Regulation, the previously optional regulated third party access (cf. section 2.1 – the other two alternatives were negotiated third party access and single buyer model) now became compulsory (Squicciarini et al. 2010: 4) – although small differences had been noted in practice between this and the previously available alternatives (Hauteclocque & Talus 2011: 4). Third party access was now not only regulated, but regulated in a particular way: market-based methods should be the norm for congestion management on interconnectors. Roughly stated, this meant that capacity on – access to – cross-border networks should be allocated through auctions, where commercial actors wanting to engange in cross-border electricity trade would bid on the available capacity on a given interconnector. This would be subjected to further deliberations within the regulatory committee. The Regulation was however silent on how such methods *within* member states should look like (Squicciarini et al. 2010: 4).

Alongside the second package, the European Regulators Group for Electricity and Gas (ERGEG) was established through a Commission Decision, with the aim of facilitating cooperation among national regulators in order to reach the goals stated in the directives. ERGEG would also cooperate closely with the regulatory committee laid down in the Electricity Regulation, without interfering with its work (Commission 2003). ERGEG would have an advistory role vis-à-vis the Commission (Pollak et al. 2010: 90), and vis-à-vis the regulatory committee (Sanden 2009: 206).

While the directives of the second package entered into force in 2005, the Regulation entered into force in July 2004. A requirement contained in the latter – market-based methods for allocating capacity on interconnectors – was not fulfilled at that time: more than half of the most congested interconnectors did not meet this obligation (13 of 25, to be specific) (Meeus et al. 2005: 30).

Developments in TSO cooperation and outlook

The contents of the Electricity Regulation had been shaped within the Florence Forum, where sector-specific actors had, one step at a time, reached an agreement (Hauteclocque & Talus 2011: 7). Following identification by the Commission of impediments to market integration, sector representatives had deliberated within the framework of this forum – on a voluntary basis. While diverging views remained as to concrete steps, over time a general consensus on a number of issues was established (Squicciarini et al. 2010: 3).

Moreover, cooperation within UCTE took a step forward, with an extensive agreement signed by its member TSOs in 2004. The Operation Handbook was updated, expanded and connected to a separate agreement (the 'Multilateral Agreement') in which procedures for monitoring compliance with the operation standards was described (UCTE 2009: 42). However, as a Commission informant noted, the legal status of these outputs was unclear. On the other hand, a representative from the former ETSO, described these rules as quite detailed, and noted that UCTE had monitored its members by gathering data and conducting inspections. Noncompliance could be sanctioned by fines. The ETSO informant noted that UCTE's work was very structured and comprehensive, going very much into detail – hardly surprising, as it spanned a large area with different cultures and languages, yet the UCTE members emotionally dedicated to these rather slow-moving processes.

According to a former ETSO representative, during deliberations on the second package, the TSOs thought that, given their role regarding developing the market, they should have a special position. The idea of TSOs taking an active role together with national regulators on cross-border issues, however, was still an alien thought in Brussels, the same informant noted. At this point in time, the former ETSO representative added, the general outlook was of a national scope, yet amongst TSOs, internal discussions on these matters were picking up speed (ETSO interview).

TSOs from all over Europe discussed market issues within ETSO; Continental European TSOs cooperated on system operation within Continental European synchronous zone; and within the Nordic synchronous zone, the Nordic TSOs cooperated on operation, market and infrastructure investments. Thus, whereas the Nordic TSOs could "talk about everything" when they met within the Nordel setting, continental European TSOs concentrated on *either* market issues *or* operation issues, depending on the whether they met within UCTE or ETSO (ETSO interview).

Summing up the early years of the new millenium

During the early years of the new millenium, new actors emerged following developments taking place at the European and at the member state level. The establishment of energy regulators was now mandated by the EU, although having already been in place in most countries, with some exceptions. With liberalisation progressing at an uneven pace, *transmission system operators* (TSO) were emerging as separate entities from the previous

vertically integrated companies in many countries. Ownership unbundling was not mandated by the EU, as opposed to the mandatory legal unbundling, but nevertheless developing in practice in a number of countries as national energy markets were liberalised, with the UK and the Scandinavian countries as early movers. Nonetheless, in many cases large production companies still owned the networks, although the networks were placed in a separate subsidiary company.

4.3 Prelude to the 3rd package (2005-2007)

This part will focus on the period of time leading up to the formal presentation of the Commission's proposals for a third package.

4.3.1 High prices and low competition

As the deadline for transposing the second package came and went, the Commission was satisfied with neither existing legislation nor the member states' implementation thereof (EurActiv 2006a; Zeit 2006a). Implementation deadlines had been missed by a number of member states. Moreover, since the initiation of energy market liberalisation, a series of mergers and acquisitions had occurred. National champions like EDF, Enel, EON, RWE, Vattenfall, Endessa and Electrabel were taking over companies in other countries (Meeus et al. 2005: 30). These 'seven brothers' (Thomas 2003) responded to deregulation by expansion in order to retain their market share, which had been made possible by the very same liberalisation process (Domanico 2007: 5067).

Coinciding with this was a rapid increase of global energy prices, which triggered critique of the liberalisation project which many saw as not delivering on the promised results in terms of lower energy prices as well as threathening security of supply (IEA 2005).

Responding to these developments, the Commission's DG TREN and DG COMP launched a sector inquiry, using reinvigorated competition powers passed in 2003. The study put electricity and gas markets under the spotlight, officially motivated by concerns for increased ownership concentration and following an increase in energy prices (Commission 2007e).

4.3.2 Early EU discussions

At a meeting of the European Council in October 2005, having assembled at Hampton Court, European member states agreed to launch a common energy policy for Europe. It was reported that this had been brought about following a UK change of position. A comprehensive approach was called for, one in which energy and climate change issues should be integrated. Notably, one of the suggestions contained in this initiative put forward by Tony Blair, British prime minister at the time, was "better interconnection between the EU's power grids in order to establish one single grid." Agreement was general, however, and did not cover any concrete steps (EurActiv 2005).

In March 2006, the Hampton Court summit was followed by a green paper from the Commission. Here, six priority areas were mentioned, one of which dealt with an internal energy market, which could contribute to lower prices, security of supply and competition, the latter which was postulated as being positive for the environment (Commission 2006b: 5).[27] Notably, it was pointed out that a "**European grid code** could encourage harmonised, or at least equivalent, grid access conditions" (Commission 2006b: 6, emphasis in original).

Moreover, the Commission pointed to ongoing work within CEER and ERGEG regarding this matter, but evaluated this as moving too slow.[28] At this point, the Commission mentioned an option of a European energy regulator with decision-power on common rules, possibly assisted by a formal network of TSOs (Commission 2006b: 6). Under reference to a blackout in 2003, such a TSO network could also contribute to enhanced cooperation on system security, including common standards (Commission 2006b: 8).

At this point in time, then, renewed calls for EU legislation within the energy sector were heard, and early discussions on European network codes,which could be created by an EU energy regulator together with TSOs, took place.

[27] The remaining five were security of supply, sustainable and diverse energy mix, climate change, technology innovation, and an external energy supply.

[28] The Council of European Energy Regulators (CEER) was established by national regulatory authorities in 2000, existing alongside ERGEG in the years 2003-2011, and alongside ACER since 2011.

4.3.3 Interruptions in energy supply and calls for more cooperation

As a prelude for subsequent developments, issues of security of supply gained some salience following the EU enlargement in 2004, with the new central and eastern European member states being concerned about their dependency on Russian energy supplies. However, at this point, few advances in energy security were made by the EU (Buchan 2010: 373). In 2006, attention was again drawn to security of supply. Coinciding with the Commission's work on the sector inquiry, interruptions in electricity and gas supplies occurred (EurActiv 2006b).

In January 2006, gas supplies to Europe were also interfered. Due to a disagreement on prices between Russian and Ukrainian energy companies, Russia cut off its gas supplies to Ukraine, subsequently causing an interruption of supply to EU countries (EurActiv 2006c). The gas crisis between Russia and Ukraine in 2006 contributed to placing security of supply on the agenda (Norway's Mission to the EU interview).

The Commission responded to the incident by calling for more coordination of member states' energy policies (EurActiv 2006c), whereas the Council at its subsequent Spring meeting called for better coordination mechanisms with which potential future incidents could be managed (Council 2006: 5).[29] Specifically, the Council drew attention to the need for better cooperation between TSOs and national regulators (Council 2006: 6).

Later in 2006, the Commission Decision of 9th of November amended the annex of the 2003 Electricity Regulation according to a comitology procedure laid down in the Regulation.[30] The annex contained guidelines on the management and allocation of available transfer capacity of interconnections between national systems (Commission 2006a). The new guidelines were based on work conducted within regional 'Mini-Fora' from 2004. Initiated by the Commission and the Council for European Energy Regulators (CEER) (later joined by ERGEG), these meetings gathered TSOs, stakeholders, power exchanges and member state governments for deliberations. With objectives and measures defined in wide terms, the

[29] At this meeting, the European Council also adopted an Action Plan for 2007-2009.

[30] When legislation is passed by the EU, particular requirements can be imposed on the Commission in its work in preparing this legislation for implementation. *Comitology* refers to a requirement that the Commission conduct its executive tasks together with a committee (here, different variants exist) consisting of national representatives (Bergström & Héritier 2007: 171).

results of this work were mixed, because a variety of practices were possible within the same framework (Squicciarini et al. 2010: 5-8).

In November 2006, a blackout caused interruptions in electricity supply within the continental European synchronous zone, affecting large parts of Europe.[31] Adding a blackout originating in Italy in 2003, a Commission representative described these two incidents as major factors for bringing about the establishment of ENTSO-E and the procedure for developing network codes. Moreover, this convinced many about the concept of having a common set of binding network codes. The reason was that these events revealed the flaws in the arrangements for TSO coordination existing at the time: due to the physical interconnectedness of national transmission networks, cooperating on the interface between them – i.e. between these national systems – was not enough. Moreover, these events "shifted the majority in favour of this kind of approach," noting that not everyone was convinced (Commission interview). The other informants, however, did not refer to these incidents.

With general agreement among the member states and the backing of a Commission very much concerned by the interruptions in supply, the EU stepped up its efforts for making a new energy market package, in which the existing cooperative arrangement in place within the electricity sector would be subjected to evaluation. This was also supported by the European Parliament, which, in a response to the Commission's green paper called on the member states to delegate powers so as to enable national regulators to regulate on cross-border issues (EP 2006: amendment 86). Moreover, it called on the Commission *and* the member states to 'promote' TSO cooperation, adding that the need for a new formal TSO network – as suggested in the green paper – should be carefully evaluated, given the plethora of existing TSO associations that could be further developed (EP 2006: amendments 87, 90).

4.3.4 EU discussions on measures and scope of a third package

Commission: an internal energy market needs deeper cooperation

By 2007, then, the EU was working on a third legislative package. In January, the Commission released several Communications regarding this (Commission 2007c, 2007e, 2007h), one of which was the *final report on the sector inquiry.* This report indicated "serious

[31] A blackout can occur when the network is overloaded, thus causing a breakdown (Pollak et al. 2010: 25).

shortcomings in the electricity and gas markets," with major barriers to competition (Commission 2007e).[32] As a result, the current state of affairs in terms of competition and liberalisation was found insufficient. In the communication on an *energy policy for Europe*, the Commission pointed out that 'technical standards' essential for trade across borders were only slowly converging, and subsequently called for stronger measures in order to avoid blackouts: standards for system operation should be developed by a EU-level TSO association, and be made binding by energy regulators (Commission 2007d: 8-9). Consequently, the message explicitly conveyed from the Commission to the European Council and Parliament was – among others – to speed up harmonisation of such technical standards as well as establish a EU-level mechanism for cooperation among regulators to ensure an European outlook, with possibilities for review by the Commission in cross-border matters (Commission 2007d: 20) – referring to experiences with such arrangements within the telecommunication sector (Commission 2007d: 8).

Concomitantly, in a communication pertaining in particular to the internal energy market, the Commission noted that the sector inquiry had given it "substantial insight" into the current state of affairs as relating to liberalisation (Commission 2007h: 22). Under reference to shortcomings for competition in terms of market concentration and increasing prices, the Commission underlined the need for more coordination at a European level, pointing to the blackouts in 2003 and 2006 as indicators for the interdependency between member states in terms of security of supply. As a result, the Commission made a case for legally binding 'operational security rules' and improved TSO cooperation. It was also noted that competition could contribute to sustainability via a positive effect on energy efficiency as well as by facilitatating market access for renewable energy production (Commission 2007h: 3-9).

Because electricity networks in Europe initially had been constructed as national networks rather than as a single European network, the Commission emphasized the need for enhanced TSO cooperation. Subject to requests by the Commission or national regulators, TSOs should address the issue of interoperability between the respective (national) networks, among others by establishing common standards on technical issues pertaining to secure operation. Such cooperation could be an extension of existing TSO associations that would get a more formal

[32] Identified shortcomings were "particular problems include high levels of market concentration; vertical integration of supply, generation and infrastructure leading to a lack of equal access to, and insufficient investment in infrastructure; and, possible collusion between incumbent operators to share markets" (Commission 2007b).

role (Commission 2007h: 16-17). In the Commission's opinion, then, more TSO cooperation was needed to integrate the national networks, with the ultimate goal being a European network. Moreover, energy regulators at a national as well as at the European level should be strengthened, with different options described for the latter: a gradual development of existing arrengements; a strengthened ERGEG able of making binding decisions on closely delineated technical issues and 'mechanisms' pertaining to cross-border issues; and a new EU body (Commission 2007h: 14).

Council and EP: Extend existing practices, but respect national sovereignty

In March 2007, the Council expressed its support to the suggestions presented in the Commission's internal market communication, and concurred with the Commission on the need to set up a new EU-level cooperation mechanism for national regulators and for TSOs, respectively. The former, moreover, regarded 'important' cross-border issues, whereas the latter should deal with system operation while building on the cooperative arrangements among TSOs already in place. Moreover, the Council also agreed that a better system for conducting and managing cross-border electricity transfers, mentioning 'technical standards' in this context (Council 2007a: 17). Climate change issues were given much attention at this meeting.

In a report tabled by the European Parliament's Committee on Industry, Research and Energy (ITRE) support was expressed to the Commission's proposal of establishing an EU-level regulatory agency for better cooperation among regulators on cross-border issues, with a given national regulators alone being responsible for issues pertaining *only* to the national market. Moreover, technical harmonization of networks should be carried out (EP 2007b). These aspects were kept in the plenary resolution passed by the EP in July, with the addition of requesting the Commission to make a road map for the creation of a single EU electricity network (EP 2007a).

During the June Council meeting, a policy debate on the internal market was held, yet no further details are provided (Council 2007c). Prior to the June Council meeting, however, the German presidency had sent out a query to member states to map their positions on – amongst others – new cooperative structures at a European level for national regulators and TSOs,

respectively (Council 2007e). Most member states supported the need for better EU-level cooperation among regulators and TSOs, respectively.[33]

Summing up the period from 2005 until mid-2007

During this 'prelude' to the third package, existing legislation and practice were put under pressure by developments in the market: higher energy prices, market concentration and interruptions in supply contributed to discussions on energy market reform within the EU, which saw the need for more coordination within the European energy sector. Hence, early scoping for a third package was carried out, which signalled differing views among and within the EU bodies.

4.4 Making a 3rd package (2007-2009)

4.4.1 The package and the EU legislative process

Internal energy market issues were subject to co-decision, meaning that the Commission would table proposals that would have to be passed by the Council *and* by the European Parliament (Buchan 2010: 363).[34] In its work on making the proposals to the third package, the Commission's Directorate-General for Transport and Energy (DG TREN) had consulted with 150 stakeholders, which provided input to an impact assessment accompanying the package (Pollak et al. 2010: 102). The TSOs had been successful in influencing the third package (EURELECTRIC interview). The package, moreover, was presented in September 2007. The stated objectives were "*consumer choice, fairer prices, cleaner energy and security of supply*" (Commission 2007c, emphasis in original).

Parallel to the work on a third energy market package, the EU also focused on climate change and sustainability. Consequently, negotiations on, on the one hand, the third energy market package, and on the other, climate change and sustainability, to a large extent coincided. Thus, climate change and sustainability were taken into consideration in the third package

[33] Too many to be referred to individually here, these documents were located through a search for document number 9905/07 at http://www.consilium.europa.eu

[34] Co-decision largely corresponds to the *ordinary legislative procedure* introduced with the Lisbon Treaty.

(Norway's Mission to the EU interview). Moreover, deliberations on the Lisbon Treaty were also taking place – in parallel to discussions on comitology, where the European Parliament would manage to increase its role (Guéguen 2011).

Constituting a third legislative package on the internal energy market, then, the Commission tabled two directives and three regulations. With the exception of the regulation establishing an EU level energy regulator (the 'ACER Regulation'), the package would amend existing legislation.[35] While the legislation on gas will not be treated here, a short note on the Electricity Directive is called for. Here, the Commission proposed mandatory ownership unbundling, which would entail vertically integrated companies having to sell their networks. This idea was also put forward for the Gas Directive. Ownership unbundling raised controversy, with member states divided on the issue: while the UK supported the idea, Germany and France strongly opposed such a measure (Eikeland 2011a, 2011b).

Part of the package was also a proposal for an amended Electricity Regulation (Commission 2007f), which introduced the NC procedure.[36] Such a procedure had not been part of the previous Electricity Regulation from 2003, which focused more on output than on process. The Electricity Regulation of 2009, on the other hand, was process-oriented as it codified not just the output that were to be achieved, but also the procedure through which these outputs would be produced. This included listing tasks and responsibilities of the different parties to partake in the procedure as well as being specific on deadlines and the course of action in the case of non-compliance with these.

In the following, the various aspects of this procedure will be treated, from proposal to the formal decision making it EU law. The presentation will mainly concentrate on the developments pertaining to the Electricity Regulation, but attention will also be given to the ACER Regulation where the tasks and powers of ACER are relevant to the suggested procedure.

[35] Proposals tabled would amend the Directives on Electricity and Gas, respectively; and the Regulations on Electricity and Gas, respectively.

[36] This would amend Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity.

4.4.2 The Commission's proposal

Insufficient state of affairs

In its proposal, the Commission notably pointed out that with an increasingly complex energy sector, existing cooperative arrangements, in practice requiring unanimity among 27 regulators and over 30 TSOs, were rendered as inefficient: "It has lead to a number of non-binding codes and efforts to reach agreement on common approaches through 'gradual convergence' but has not lead to real decisions on the difficult issues that now need to be taken" (Commission 2007f: 10).

The Commission pointed out the technical challenge faced by electricity companies due to network codes that differed "enormously" across member states – sometimes even within the same country (Commission 2007a: 48). While acknowledging the existence of regional network codes in addition to the national ones, ther Commission noted that these were recommendations (Commission 2007f: 14).[37] This also applied to non-binding guidelines that had been issued by national regulators cooperating within ERGEG (Commission 2007a: 47).

In documents attached to the proposals for the Third Package, the Commission credited the existing voluntary TSO associations with significant contributions to the internal market along with "efficiency and the safety of the networks" (Commission 2007a: 52; see also Commission 2007f: 13). There was a plethora of regional TSO organizations cooperating to a smaller or to a larger degree on many issues or on a more restricted set of issues. TSO cooperation revolved around the need to agree on the interface between systems understood to be more or less independent from one another. A Commission representative noted that, in terms of the energy spent on cooperation, TSOs "spent the time necessary towards that philosophy".

The Commission presented a rather sombre assessment if no steps were taken: In such a case, the TSOs would remain more or less nationally oriented, with limited cross-border coordination, thus giving rise to "a higher probability of capacity crisis (which may ultimately lead to blackouts in the case of electricity) and in any event artificial congestion created at the borders" (Commission 2007a: 52). Notably, it was pointed out that the shortcomings of

[37] E.g. the UCTE operational handbook for security and reliability of the electricity transmission networks (Commission 2007f: 14).

existing voluntary TSO cooperation had already been revealed: reference was made to blackouts caused by too little coordination among TSOs on network operation, to insufficient investment in the infrastructure itself; and to the slow progress in TSO negotiations on harmonising network codes (Commission 2007f: 13-14).

Need for harmonized network codes

The Commission pointed out that an internal energy market – in this case for electricity – had yet to materialize, and that attaining such a goal would require stronger measures. With this aim, a way of integrating national markets – possibly via a regional route – would be to harmonize network codes (Commission 2007a: 48): integration needed "a coherent set of technical and market codes" (Commission 2007f: 14). The purpose of this was twofold: On the one hand, such codes would facilitate the functioning of the marked, and, on the other hand, of the transmission system (Norway's Mission to the EU interview).

According to the Commission, there were three main problems with the existing network codes, which were 1) non-comprehensive, as they did not cover all issues; 2) often incompatible with one another, and 3) often not legally binding or enforceable (Commission 2007f: 14). Moreover, the Commission argued that network codes had frequently been introduced by vertically integrated companies (Commission 2007a: 48).

A formal procedure for network code development

As a result, the Commission proposed that TSOs strengthen their cooperation on network code development (Commission 2007f: 14). Network codes were described as "technically complicated," and as requiring efficient ways for making necessary revisions (Commission 2007f: 14). The proposal for an amended Electricity Reguation included a procedure for how stakeholders were to interact for agreeing on network codes, with the possibility to make codes legally binding. Moreover, the Commission envisaged itself – or national regulators – charging TSOs with the making of these. The development of network codes should be coordinated at the EU-level, carried out by a TSO association.

Specifically, the proposal sought to build on existing cooperation as regards network codes (Commission 2007f: 14). This idea had been endorsed by the European Council in March 2007: the work of an 'ETSO+' should build on "*existing cooperation practices*" (Commission

2007a: 26, emphasis in original).[38] Nevertheless, while allowing for the option of building on previous associations like ETSO, and crediting regional initiatives on network operation and investment planning in particular as having had a positive effect on market integration; the Commission underlined the need for an organization with a "central and permanent cooperation structure both in terms of organisation and practical tools for planning and operating the networks" (Commission 2007f: 15).

A new European TSO organization

In terms of organizational structure, the Commission suggested a new TSO organization, the European Network of Transmission System Operators for Electricity (ENTSO-E), which would be formally mandated at the EU level to carry out tasks like developing network codes (Commission 2007f: 15). Moreover, this development should be conducted "within a reasonable time" following a formal request by the Commission (Commission 2007f: 27). Finally, TSOs should cooperate on monitoring the implementation of such codes (Commission 2007f: 14).

Mandating ENTSO-E with the task of developing network codes was regarded a 'pragmatic' solution, given existing voluntary processes and the technical complexity of the matter (Commission 2007f: 14). The picture emerging from interviews was one of TSOs in possession of more expertise on which network codes could be based – especially regarding system operation, which is a core TSO task – than the national regulators, or the Commission, for that matter (despite having accumulated substantial knowledge on this in particular over the two last decades). Thus, the Commission openly stated that it needed to "rely more on TSO associations' competences" (Commission 2007a: 26). This expertise gave TSOs influence (EURELECTRIC interview).

ENTSO-E should, however, conduct its work in a transparent manner, and state its priorities as well as the network code specifications in an annual work programme "prepared in consultation with all stakeholders and the new Agency [ACER]" (Commission 2007f: 14).

[38] The terminology in use at this point referred to "technical standards for network security" and "recommendations on precisely defined technical issues such as standards and operational rules" (Commission 2007a: 26). The term "grid codes" was also used.

Similarly, from the initiation of the process of drafting any network code, stakeholders should be consulted (Commission 2007f: 15).[39]

Advisory input from national regulators

In the Commission's proposal, regulators were given an advisory role in the development of network codes. In a proposal for a separate regulation tabled by the Commission, ACER – a EU-level regulatory agency – was to be established (Commission 2007g). The Agency for the Cooperation of Energy Regulators (ACER, also referred to as the Agency) was to replace the existing ERGEG.

Acting through ACER, national regulators were to provide advisory input to the Commission as well as to ENTSO-E on network codes: the Commission would consult with ACER before "inviting" ENTSO-E to draft network codes. Moreover, ACER could give an opinion on these *if* it considered the codes as failing to meet certain objectives ("ensure non-discrimination, effective competition and the efficient functioning of the market"), or in the case that ENTSO-E either did not develop network codes "within a reasonable time", or its constitutive TSO members failed to implement these (Commission 2007f: art. 2e).

Part of the Commission's proposal, then, was regulatory oversight of the content of and of the compliance with such codes – including, the authority to enforce and/or adopt network codes if the TSOs were not able to do so themselves. Depending on the matter at hand, national regulators, ACER, and/or the Commission would conduct monitoring and enforcement tasks (Commission 2007f: 14). ACER would monitor the work of ENTSO-E, including the consultation processes (Commission 2007f: 15). Thus, a "general advisory role" was envisaged for the ACER (Commission 2007a: 50), both in relation to TSOs and towards the Commission.

Regarding regulatory oversight, the Commission had considered several alternatives: the possibility of conducting such regulatory tasks itself (rejected due to requirements for expertise and resource usage), or creating a separate structure resembling the System of European Central Banks, the Network of Competition Authorities, or the European Economic Interest Grouping. The alternatives were however rejected on the grounds of lacking a legal

[39] Explicitly mentioned were producers, suppliers, customers and distribution system operators (Commission 2007f: 15).

basis (Commission 2007a: 49-50), or due to not meeting "the objectives the Commission wants to achieve" (Commission 2007a: 50). Consequently, the Commission concluded that a regulatory agency was called for (Commission 2007a: 50).

In creating the Agency for the Cooperation of Energy Regulators (ACER), organizational features as well as location came into play: a Commission representative noted that the same person who had written the early draft of what would eventually become the ACER Regulation[40] had been inspired by the European Railway Agency – initially, this person had more or less "put in place the railway agency". This also had a practical reason: within the Commission, the energy sector was still organized in a Directorate-General together with the transport sector, and consequently, bureaucrats working on energy and bureaucrats working on transport were colleagues working within the same building.

Network codes as EU hard law

Network codes could be made legally binding through comitology. In the case that TSOs acting within ENTSO-E were to fail to develop network codes, this could also be done through a comitology procedure initiated by the Commission (Commission 2007f: 14).

On this matter, a Commission representative stated that they had looked at the results achieved within the telecom sector as a rough indicator of what could be attained through comitology, without providing any details as to how this should be organized for the electricity sector. However, this informant pointed out that in the original proposal, the Commission had suggested "quite traditional comitology". In terms of the legislative output made legally binding through comitology, i.e. the network codes, he compared this with legislation on within the aviation sector (airport safety) as well as the railway sector.

Eager for a higher pace towards an internal energy market, then, the Commission had presented a proposal for a new pan-European TSO organization that would draft network codes which could be made legally binding across the EU. National regulators were to provide advisory input to the network codes through ACER, an EU level agency, and market

[40] Regulation (EC) No 713/2009 (Commission 2007g).

actors would be consulted throughout the process. How did the TSOs, regulators and market actors respond to the Commission's suggestion? [41]

4.4.3 Sector response to the proposal

Transmission system operators' response

The TSOs were generally positive to the Commission's proposal, noted informants from the Commission and ETSO. TSOs regarded the Commission's proposal as involving concrete measures for how TSOs were to cooperate as well as on which issues. Moreover, network codes could be made legally binding. The TSOs saw that they were given "a powerful tool for changing the electricity market and enhancing TSO cooperation within the European electricity sector" (ETSO interview).

The TSOs were interested in binding network codes. The Commission had provided for two types of network codes: on the one hand, codes that could be made binding through comitology, and on the other, codes that could be drafted and adopted by ENTSO-E on a voluntary basis. However, the TSOs were not particularly interested in the voluntary codes: "during this process [the making of the Regulation], the TSOs clearly said [that they] didn't need voluntary codes, they need something that is legally binding" (Commission interview).

The most important thing for the TSOs was getting the cooperative arrangements into place. Moreover, within a scheme of regulated tariffs, TSOs were willing to take on tasks beyond the national realm (ETSO interview). Thus, TSOs were interested in being entrusted with the task of promoting cross-border developments, regarding themselves as unpartial actors as they didn't have strong commercial interests. Consequently, when the third package was announced, containing proposals for quite far-reaching TSO cooperation, this was welcomed by ETSO (ETSO interview).

Albeit a majority of TSOs were generally positive, there was also scepticism towards change. This stemmed from "nostalgia" with existing organizations like UCTE (Commission interview). ETSO had welcomed the proposal (ETSO interview). Having cooperated

[41] Due to limited time and resources, the response of non-state actors has been limited to TSOs/vertically integrated companies, market actors and national regulators.

extensively within Nordel, the Nordic TSOs were also positive (Commission, ETSO interviews). Still, the latter group was concerned about losing the well-functioning *regional* cooperation within Nordel if replacing this with a *European* setting with implications for the level of ambition for TSO cooperation (ETSO interview).

UCTE was worried (ETSO interview). They were concerned that the existing cooperation on system operation, which had come a rather long way, would be jeopardized, as they didn't quite see that this could be carried over into new arrangements. Moreover, as one informant stated, this was also a matter of power: "those that ran the UCTE thought that this was the best way of doing things, and those that had positions within this organization were probably also worried about losing these" (ETSO interview).

Within UCTE, however, differences existed. While the German TSOs had been rather active within UCTE, and that they had been "rather hesitant", the French and the Belgian TSOs were positive. The French, notably, had taken "a global view on things", recognizing the advantages of cooperating more extensively on a European level (Commission interview).

Internal TSO discussions in 2008

Once the proposals for a third package were on the table, TSOs realized that a completely new way of cooperating among TSOs was required, but at first the TSOs didn't quite grasp the extent of this (ETSO interview). Soon, however, ETSO contacted the other organizations, and suggested initiating a project with the purpose of establishing a new organization (ENTSO-E) as called for by the Commission. With the proposed Electricity Regulation already on the table, it would be better for the TSOs to adapt as soon as possible, as it would require some effort to arrive at an agreement on how they would want the new organization to be (ETSO interview). This project was driven by its TSO members (ETSO interview).

At first, UCTE was less receptive to the idea that TSO cooperation across synchronous zones was at all viable. The Nordic TSOs pointed out that they had managed to do this, as West-Denmark is part of the Continental European (UCTE) zone, and East-Denmark belongs to the Nordic zone. Over time, however, continental – and European TSOs in general – accepted that they had to let go of the old organizations, with the recognition that old agreements could be carried over into the new organization (Commmission, ETSO interviews).

TSOs realized that it would be better if agreement could be found among the TSOs as to how ENTSO-E should look like, because if not, others might do this on their behalf , which was considered a potent threat at an early stage. The TSOs soon understood that the TSO project could be used as to attain influence. This project lasted throughout 2008, at the end of which the TSOs had agreed on a set of statutes and founded the new association (ETSO interview). When ENTSO-E became operational in July the following year (ENTSO-E 2011b), the regional associations were dissolved (ETSO interview). Reassured by the possibility to carry existing cooperative practices into new arrengements, TSOs welcomed the Commission's proposal, which gave them a clear mandate to make network codes on a European scale.

National regulators' response

National regulators were not satisfied with an informal, advisory role: national regulators, as represented by ERGEG and CEER, were "obviously not pleased with the Commission's proposal to create a new body for cooperation among NRAs with no real powers" (ETSO interview).

In 2006 and up to the presentation of the formal proposal to the Electricity Regulation, national regulators within CEER and ERGEG had worked on getting their voices heard. They had a number of meetings with persons within the Commission, EP and the Council that were centrally placed vis-à-vis energy policy-development (ERGEG & CEER 2006). Moreover, regulators had been working intensely on providing input to the Commission pertaining regulatory oversight, as indicated by a number of position papers published between Feburary and June 2007. Responding to the internal market communication, for instance, ERGEG called for a regulatory framework at the EU level, possibly by extending the ERGEG mechanism, which would oversee and approve network codes whose mandatory development should be carried out by TSOs acting within a formal EU-level body. Moreover, ERGEG referred to the 2006 blackout, noting the increased interdependence among European networks (ERGEG 2007). The Commission, however, had thought that it could work with the national regulators in an informal way,[42] but as a representative from the Commission noted,

[42] In the original proposal, the Agency was to provide an opinion on network codes when these were not in accordance with the set goals, or when they were neither submitted on time nor implemented by ENTSO-E (Commission 2007f).

"the regulators didn't trust that we would work this way, so they wanted to introduce themselves in-between the network codes and comitology" (Commission interview).

When the Commission's proposal was presented, John Mogg (chair of ERGEG and president of CEER), expressed disappointment with the absence of a strong European regulator in the Commission's proposal (EurActiv 2007c). In joint press releases, ERGEG and CEER underlined the need for effective regulatory oversight of TSOs at a European level (ERGEG & CEER 2007a), a strong ACER was needed in order to safeguard the public interest. Moreover, the TSOs had been given too much influence that went "beyond what TSOs should do" (ERGEG & CEER 2007b). National regulators regarded the role that they had been given in the Commission's proposal, including their role in the development of network codes, as "too weak" (ETSO interview). In order to amend the Commission's proposal towards a strengthened role of regulators, then, national regulators understood that they had to get support of the European Parliament (ETSO interview).

Market actor response

As the sector association representing the electricity industry at a European level, the Union of the Electricity Industry-EURELECTRIC ('EURELECTRIC') had followed the EU's initial work with the third package: "We had been lobbying quite extensively when the third package came" (EURELECTRIC interview). Reading the proposal, however, EURELECTRIC wasn't sure that the Commission's suggestions to an amended Electricity Regulation would safeguard the interests of its members. Moreover, "many areas for improvements" were noted, because the proposal was regarded as "far from being balanced" (EURELECTRIC interview).

EURELECTRIC was concerned about the amount of power given to TSOs. By allowing TSOs to draft network codes without regulatory oversight, the Commission was seen as going as far as to give TSOs regulatory powers, because the proposal was a "framework for regulatory issues that would be filled in by TSOs" (EURELECTRIC interview). The Commission had allowed this because they tended to regard unbundled TSOs as largely neutral actors, whereas EURELECTRIC saw TSOs as actors with vested interests (EURELECTRIC interview). Consequently, the Commission's proposal would make TSOs "judge and party" – a step that EURELECTRIC saw this step as "unprecedented", and as something that "should not be done again" (EURELECTRIC interview).

EURELECTRIC had publicly stated its support of regulatory oversight, underlining as well the importance of involving the Commission in this, noting that national regulators alone would not ensure a European outlook (EURELECTRIC 2007). Thus, EURELECTRIC teamed up with national regulators to lobby the European Parliament for regulatory oversight as well as for strengthening the consultation mechanism through which stakeholders – amongst others commercial market actors represented by EURELECTRIC – would have the opportunity to get their voice heard (EURELECTRIC interview).

4.4.4 Reading in the European Parliament

Whereas TSOs had welcomed the original Commission proposal (ETSO interview), regulators and market actors were critical to the powers granted to the TSOs regarding network codes. EURELECTRIC had teamed up with national regulators to lobby the European Parliament for more regulatory oversight (EURELECTRIC interview).

Seeking to influence the political game, some of the national regulators were more active than others, with the regulators from the major European countries like France and UK being seen as influential by the informants from the Commission and Statnett. Notably, the Commission informant indicated with some astonishment that he didn't know "exactly what happened" as regards the German regulator, but noted that this regulator was "younger" (Commission interview).[43] John Mogg, chairman of the British regulator *Ofgem*, was pointed out as an important player as head of ERGEG and CEER (Commission, ETSO, Statnett interviews). As a former Director General in the Commission, he was quite familiar with the system (Commission interview). Other informants had not observed a difference in terms of how active the different regulators had been (ETSO interview). In general, however, irrespective of the extent of independence from national governments, regulators were seen as being in close contact with politicians: "for regulators, it seems to be a natural thing to talk to politicians" (Commission interview).

Supported by EURELECTRIC (EURELECTRIC interview), national regulators suggested 'framework guidelines' (Commission interview). A framework guideline would be drafted by regulators, resulting in a political document on the problem(s) that a given network code was

[43] The German *Bundesnetzagentur*, while established in 1998, was not given the responsibility for the energy sector until 2005 (Bundesnetzagentur 2010).

to resolve. Drafting framework guidelines would be "a political process" thus removing the political issues from the network codes, which were to be drafted by TSOs (ETSO interview). Moreover, the regulators envisaged framework guidelines as becoming legally binding and connected to specific deadlines, which the Commission considered a less fortunate suggestion (Commission interview).

The push for more regulatory oversight however resonated with the European Parliament: "many Members of Parliament saw the need for a strong European regulator, because they did not think that the TSOs would to be able to handle this [the responsibility given to them in the Commission's proposal]" (ETSO interview). Parliamentarian support of a stronger ACER was also reported by the media (EurActiv 2008b). The rapporteur, Alejo Vidal-Quadras, called for more focus on harmonization of network codes and regulatory framework, adding that voluntary harmonization of "technical and market rules" would be insufficient (EP 2008: 35). [44] This report also introduced the term 'network codes', a concept which until that point had been described as technical/market/security codes or standards.[45] Moreover, he put forward the concerns raised by regulators and market actors that, if implemented in its original form, the Commission's proposal would give TSOs regulatory tasks: "Transmission System Operators are given a quasi-regulatory status while the Regulatory Agency [ACER] seems to be reduced to the role of an advisory body" (EP 2008: 33). Moreover, this represented an allocation of tasks that did "not correspond to the actual and *natural division of competencies* at the national level" (EP 2008: 33, emphasis added).

Moreover, Vidal-Quadras gave regulators a stronger role in the development of network codes via framework guidelines. Not only should the network codes be developed based on framework guidelines set by ACER, but these codes should also be subject to approval by ACER (EP 2008: 13-18), thus making framework guidelines binding. Specific deadlines were also included in Vidal-Quadras' report. Important amendments regarding the NC procedure are listed in figure 3.

[44] Vidal-Quadras is a Spanish Member of Parliament and part of the Group of the European People's Party (Christian Democrats).

[45] For clarification purposes, the term 'network codes' is used more or less throughout this thesis.

- Emphasis is put on regional cooperation, yet this should be compatible with *European* integration.
- ENTSO-E to submit draft network codes to ACER for approval.
- ACER to monitor implementation of network codes – non-compliance to be notified to Commission.
- ACER to be mandated by Commission to develop draft framework guidelines within 6 months
- Within 6 months of ACER adoption of guidelines, Commission shall mandate ENTSO-E to develop draft network codes in accordance with framework guidelines

Figure 3: Amendments relating to the development of network codes. Source: EP (2008).

The TSOs were generally "supportive of a new regulatory authority", and had been "quite positive when the regulators started discussing how one could lift the political parts out [of the network codes]" (ETSO interview). The TSOs supported letting regulators deal with the more political issues which would be contained within the framework guidelines: "I think they [TSOs] even liked the fact that they would get guidelines from regulators" (Commission interview). Still, this was the major concession for the TSOs (ETSO interview).

Drawing the line between framework guidelines and network codes, however, proved an issue of some controversy. Grey areas between framework guidelines and network codes exist. TSOs defended their responsibility for network codes, wanting neither ACER nor national regulators to interfere with this task. TSOs "obviously did not want an Agency to do all of this work" because the technical expertise resides with the TSOs. The TSOs stayed very much alert to calls for a strengthened ACER, as they thought they knew "the technical details better than the others" – even with the aid of consultants ACER would have difficulties in agreeing on such codes (ETSO interview). TSOs were regarded as facing challenges in the political game, in the sense that the message they wanted to convey often concerned very technical issues that were difficult to communicate to politicians (Commission, ETSO, Statnett interviews).

TSOs were therefor sceptical of the idea of making framework guidelined binding. As it turned out, however, the proponents of a more powerful ACER, one that could make legally binding decisions, faced a legal restraint posed by the Meroni Principle. According to EU case law, the EU could not vest new powers in another organizational body (ACER) without basing this in the Treaties. The Commission declared Parliament's call for a stronger ACER

as legally unviable, given the absence of sufficient support among the member states for amending the treaties in order to create such a powerful EU Agency on energy. Thus, framework guidelines could not be made binding for the subsequent development of network codes, but the concept of ACER making non-binding framework guidelines was retained (Commission 2008: 2). According to an ETSO informant, this discussion between Parliament and the Commission took some time, with Parliament only reluctantly accepting a weaker ACER. Despite regarding the deadlines suggested by Parliament as "completely unrealistic," the Commission conceded on this matter, and accepted that amendment, as recalled by a Commission informant.

The interviews indicated that the European Parliament was attentive to the Electricity Regulation and to the NC procedure (Commission and EURELECTRIC interviews). While EP was seen as having taken a "pragmatic" approach (Commission interview), the Council was regarded as busy discussing other issues contained within the third package on which rather differing opinions among the member states existed (interviews with EURELECTRIC, ETSO, Commission).

In Parliament, then, national regulators and market actors found an ally for strengthening regulatory oversight in general, and the role of ACER in the development of network codes in particular. The TSOs and the Commission accepted some amendments, like the introduction of deadlines and having the political parts settled by reguators in non-binding framework guidelines, but opposed the idea of making these framework guidelines binding for the development of network codes.

4.4.5 Council reading

The Council focused mainly on the Directives on gas and electricity, respectively, as well as the ACER Regulation. This was where the major political issues were seen to be (Commission interview). This focus is confirmed by Council documents (Council 2007b, 2007d, 2008b, 2008c).

Ownership unbundling became particularly salient, and was given particular attention in the Council, as reported by informants (Commission, EURELECTRIC, ETSO interviews), and by the media (see e.g. EurActiv 2007a, 2007b, 2007c). While this issue was noted by informants as an important driver to the third package, unbundling was "also why it got stuck" due to

differing member state positions (EURELECTRIC interview). Moreover, two informants noted that it was perhaps unfortunate that unbundling became such a controversial issue, in terms of the consequences for how much attention other issues within the third package was given (EURELECTRIC, ETSO interviews).

The Electricity Regulation was regarded as "more technical" (Commission interview), and consequently, "it was not an issue for the member states" who were more concerned with unbundling (EURELECTRIC interview). Nevertheless, some political issues like *comitology* in general and the role of ACER "were influencing the content of the [Electricity] Regulation" (Commission interview). From public Council records it is clear that member states did discuss the role of ACER, with implications for the procedure (see e.g. Council 2007d).

During the course of discussions of ACER, its role as regards the development of network codes was subjected to deliberations. A former ETSO representative noted that "several member states pointed out that it would be unfortunate if TSOs were to assess political issues". The member states initially indicated different opinions regarding the tasks of ACER: "mixed-views were expressed as to the Agency [*sic*] possible involvement in technical matters (codes)" (Council 2008a: 6). As some member states wanted a stronger ACER, while others preferred to limit its role, the Slovenian Presidency submitted a compromise solution that "its involvement in technical matters (codes) should be of an advisory nature" (Council 2008a: 10), a compromise that member states had agreed on by June (Council 2008b: 2). As suggested in Parliament, ACER would draft framework guidelines, but ACER was to be an advisory body, allowed to make binding issues only on a case-by-case basis. As a result, framework guidelines could *not* be made binding, but would still be "guiding the process" (Commission interview).

Comitology was "somewhat sensitive" (Commission interview). At the end of the day, however the Council realized that, given the level of detail in network codes, it would be better if this would be settled through comitology rather than through inter-institutional negotiations (i.e. between Council and Parliament). Eventually, reassured by the inclusion of framework guidelines and that ACER would be established, Parliament eventually accepted this. With framework guidelines part of the procedure, the extent of comitology had been somewhat reduced, yet retained for making network codes legally binding (Commission interview).

The issue of whether the network codes would affect national arrangements was also raised during negotiations among the member states, resulting in an explicit formulation being inserted to restrict the scope of these network codes to cross-border issues (Commission interview).

Compromise was also reached on the two outstanding issues – unbundling and ownership of networks within the EU by third country companies – by October (Council 2008c: 17). Moreover, agreement on the voting rules for ACER was also reached: "Germany had originally pushed for bigger countries, with larger energy networks, to have a greater say over the agency's decisions. But under the final deal, all countries will have the same voting weight" (EurActiv 2008a). At the October meeting, the Council restated the role of the member states in steering the process, referring to the meeting of the European Council tasking the Commission with tabling proposals for a third package (Council 2008c: 17). In December, the agreement in Council was finalized, and endorsed by Parliament. By the end of June 2009, the Electricity Regulation had been formally passed by Parliament and Council.

The Council, then, used much 'energy' on discussing the more political issues, found in the directives and in the ACER Regulation, which however influenced the network development procedure, particularly the powers of ACER, but also unbundling, which would have consequences for what kind of actors would be involved in drafting network codes, e.g. whether or not these would be TSOs or vertically integrated companies. Split on the issue as to strengthening ACER or not, the alternative emerging from talks between the Commission and Parliament (non-binding framework guidelines) represented a viable alternative for a compromise the member states could agree to.

4.5 The adopted NC procedure

One of the major changes brought about by the third package was the formal mandate given to TSOs acting within a equally recognized organization, ENTSO-E, to develop network codes on system operation and market issues pertaining to cross-border electricity exchange (Commission interview). [46]

[46] It should be noted that some aspects of this procedure were left for the involved actors themselves to decide (e.g. how ENTSO-E would consult with market actors), with subsequent developments taking place after 2009

The NC procedure, and the Electricity Regulation in general, which many had considered as rather technical, had not changed that much from the proposal in 2007 until the adoption in 2009. This is confirmed by comparing the two documents, but was also reported in interviews. An informant from the Commission reported that they had been quite surprised by this, noting that the Commission had been provided with a strong mandate (Commission interview). The main amendments were the introduction of framework guidelines – which had the effect of reducing the extent of comitology – and the specification of deadlines.

A rough presentation of the various steps of the procedure is presented in figure 4. In a procedure initiated by the Commission, national regulators within ACER are to make framework guidelines, which then will form the basis for the network codes to be drafted by TSOs acting within ENTSO-E. Subject to approval in comitology, the network codes could be made legally binding as EU hard law. The network codes would be implemented by the TSOs themselves, and this will be monitored by ENTSO-E and ACER (art. 8-9). Here, lack of compliance with enacted network codes was also connected to sanctioning: the Commission could impose fines (art. 22.2), and the member states "shall lay down rules on penalties applicable to infringements" (art. 22.1). Following implementation, ENTSO-E and ACER were to monitor the effect of the network codes "on the harmonisation of applicable rules aimed at facilitating market integration" (EU 2009b: art. 8.8, art. 9.1). However, the network codes, should be "without prejudice to the Member States' right to establish national network codes which do not affect cross-border trade" (EU 2009b: art.8.7).

The ACER Regulation describes the internal voting rules for national regulators pertaining to framework guidelines. Each regulator is represented by one person with one vote, and a two-thirds majority rule applies (EU 2009a: article 14.3). Regarding the internal voting rules of ENTSO-E for making decisions on network codes, this was not laid down in the Electricity Regulation.

fleshing out the more detailed rules for the procedure in many instances being a practice still in the shaping. As a result, this has been left outside the scope of this thesis.

1. The Commission requests ACER to formulate (non-binding) framework guidelines on areas defined on a priority list
2. ACER consults with stakeholders, and writes framework guidelines. Deadline 12 months
3. ENTSO-E consults with stakeholders, and drafts network codes on the basis of the framework guidelines, taking, if appropriate, regional specificities into account
4. ENTSO-E sends draft network codes to ACER
5. ACER reviews the draft network codes, and writes an opinion on it. ACER could also send the draft network codes back to ENTSO-E with comments.
6. ACER sends the draft network codes to the Commission
7. Following evaluation by the Commission, the network codes might be subjected to comitology treatment, thus becoming legally binding

Figure 4: Procedure for the development of common cross-border network codes for electricity.

4.5.1 Aftermath

The development of network codes was now a mandatory task for TSOs, and could become legally binding. This marked a shift from the previous bilateral or regional voluntary negotiations producing recommendations. The NC procedure represented something completely new, which was distinct from previous TSO cooperation (reported by all informants). The task of making network codes was understood as substantial (interviews with Commission, ETSO, EURELECTRIC, Statnett), and an increase in the use of resources for cooperation was reported (Commission, Statnett interviews). Moreover, cooperation among national regulators was reported as having gone through a change. From a situation with nationally oriented regulators less concerned with European integration, the role and outlook of these actors have changed somewhat, and regulators now had an "important role on the European scene" (EURELECTRIC interview). The third package had brought about some changes in the roles and interests of actors: it had "reshuffled the power game a bit" (EURELECTRIC interview).

Moreover, the framework guidelines that had been added to the procedure during negotiations within the Council and Parliament were seen as innovative. A Commission representative referred to this as something completely new as compared to the railway sector, where the agency writes the codes. Here, on the other hand, was a "double system" in the sense that

ACER would make framework guidelines on which the network codes made by ENTSO-E would be based on. Thus, despite the end-product – network codes – being comparable to legislation within the railway and aviation sectors, the process for making network codes is different (Commission interview).

However, some issues were not resolved in the Third Package. This relates to the delineation between cross-border and national network codes, and between framework guidelines and network codes. While specific deadlines were initially accepteded by TSOs, subsequent events would push these ahead in time.

Starting with the delineation in geographic scope of cross-border network codes, a clear distinction between cross-border and national network codes was not established. Informants indicated that it would be difficult in practice to establish such a distinction at all, with the two being tightly related (interviews EURELECTRIC, ETSO, Statnett). However, this is also a legal question (ETSO interview). An informant from the Commission stated that the difference between what could be regarded as cross-border and what could be regarded as national disappears once one goes down into the level of details, noting that, in system operation, "even if there are different control areas, the cooperation between two TSOs in a way includes almost everything they do in their [respective] control areas [i.e. also nationally]." This informant also mused that transmission grids are developing towards being inherently cross-border, whereas the distribution grid remaining a national issue (Commission interview). In the end, this representative explained, this matter could be decided in comitology. Here, a member state would have to raise the objection that a given network code is not cross-border. If accepted, then, the network code would be regarded as a cross-border rule (Commission interview). The comitology step of the process was reported by informants as not finally clarified (ETSO, Statnett, EURELECTRIC interviews).[47]

Proceding to the delineation between network codes and framework guidelines, the former was regarded as technical because the more political aspects had been moved into the latter (interviews Commiossion, Statnett, ETSO). A representative from EURELECTRIC, however, displayed scepticism towards this view, drawing attention to the political aspects still inherent in network codes, although acknowledging that framework guidelines had reduced the political content of network codes (EURELECTRIC interview).Moreover, two informants

[47] This is in part due to the reform of comitology in general following the decision on the Lisbon Treaty.

regarded it possible that network codes might become politicized at a later stage, e.g. in comitology (Statnett, EURELECTRIC interviews). A former ETSO representative noted that there is a grey zone between framework guidelines and network codes (ETSO interview).[48]

Finally, deadlines connected to the various steps of the procedure were seen as tight, yet likely to be complied with for by TSOs within ENTSO-E. Informants perceived the deadlines as excerting pressure on the TSOs (ETSO, Statnett interviews). While an informal scoping phase preceding the actual drafting had been intended to provide all actors, including TSOs, with more time as well as identifying difficult issues at an early stage (Commission interview), the time for such scoping was subsequently shortened: The goal set by the European Council in February 2011 to establish an internal energy market by the end of 2014 pushed the schedule for network codes and other TSO tasks ahead in time (Statnett interview).

[48] This has proved to be an area of continued friction between ENTSO-E and ACER in the network code development procedure, as indicated by a letter ENTSO-E sent to ACER in 2011, where a framework guideline was criticised for being too detailed (ENTSO-E 2011a).

5 Analysis

Returning to the framework for the outcome of interest as presented in chapter 1, the new procedure was *more precise* in that specific tasks and responsibilities were laid down in a *formal* procedure contained within EU legislation. Most importantly, perhaps, was that compliance with this procedure would be *compulsory*, as opposed to previous voluntary TSO cooperation, and non-compliance was attached to sanctions. This chapter will investigate the factors that caused this change by analysing the empirical data presented in the previous chapter through the lenses of each of the theoretical perspectives presented in chapter 2. Finally, these are draw together in a discussion of the *combined* insights.

5.1 Power-oriented institutionalism

As noted for the power-oriented perspective in chapter 2, actors evaluate institutional design instrumentally: gains from the current state of affairs are compared to those expected from a potential alternative. Actors will support a procedure that corresponds to their preferences, taking concerns for relative power into account. Within the power-oriented perspective, in order to enact the NC procedure in its particular form this would have to have followed from the preferences of the actors with formal influence on EU decision-making. Expectations to the preferences were presented in chapter 2: The *Commission*'s first preference is a supranational solution with tasks delegated to itself – its second-best being a supranational solution in which an EU-level body is given the tasks. *The European Parliament's* first preference is the delegation of tasks to an EU-level body with itself included in regulatory oversight – its second-best is that another EU-level body carry out such monitoring. *When delegating,* the preferences of *member states* vary according to the level of the distributional conflict: if this is high, member states will prefer a horizontal network solution; whereas a low distributional conflict allows for the establishment of a single agency. In the following, the expected preferences will be compared with the ones identified in the empirical data. First I will consider whether the actors supported making a formal *EU* procedure, touching upon the matter of integration; before moving on to analysing the content of the procedure as resulting from the preferences and influence of the different actors. Finally, this section will conclude with a preliminary discussion of the impact of interests and power on the formal decision on the NC procedure.

5.1.1 Actors supported an EU-level procedure

First, these actors would have had to be supportive of having a procedure located at a European level. Looking at the period leading up to the presentation of the Commission's proposal, the member states supported the idea of common network codes at the Hampton Court summit in 2005, following a UK U-turn. This was restated at later Council meetings. In its June 2007 meeting, most member states supported the need for better TSO cooperation at EU-level *for cross-border issues*, thus displaying a concern for national sovereignty. With co-decision requiring the approval of Parliament, its support would also be necessary, and was indeed present: Parliament supported the need for an EU-level solution, calling for better TSO cooperation and technical harmonization of networks. This means that the member states and EP supported regulating this on the European level – without which the Commission, as a rational actor, would have been less likely to initiate a legislative process for making the NC procedure.

For this procedure to be formally tabled, the support of the Commission was required. The Commission wanted a faster pace in harmonization of network codes, having evaluated work within existing arrangements (among TSOs and national regulators, respectively) as insufficient. The Commission's preference for an EU-level procedure can be identified in public records, presented in chapter 4: it saw European harmonization of network codes as facilitating market integration. Having received positive signals from the Council as well as Parliament, the Commission was interested in tabling an EU-level procedure, because this corresponded to its preference for more supranational solutions. Thus, all the relevant actors supported making an EU-level NC procedure. This broad support was important in bringing about the NC, because its presence made enabled the Commission to table a formal proposal for a NC procedure. Moving on to the responsibility for the particular tasks within this procedure, I will now look at the more specific preferences of each actor, comparing those expected with the ones found through the empirical inquiry of the legislative process itself.

5.1.2 Commission wanted to shape, but not draft network codes

The empirical data from chapter 4 shows that the Commission did *not* prefer to draft the network codes itself. Noting the technical complexity of network codes and the need for an efficient way of revising these, the Commission wanted TSOs to do this through enhanced cooperation within a formal European organization (ENTSO-E). Nevertheless, giving TSOs

the role of drafting network codes could also be seen as a way of circumventing member state resistance, all the while reassuring TSOs that self-regulation would be sustained. Equally safeguarded was the Commission's preference for expedient and centralized EU-level harmonization, because the previous voluntary self-regulation would became mandatory.

Therefore, the Commission suggested a formal procedure where an EU-level body of TSOs would make the network codes. This corresponds to the Commission's expected *second* preference, but according to the empirical data, this was actually the *first* preference of the Commission. The Commission wanted to entrust TSOs with the drafting task, but this trust was linked to mandatory ownership unbundling. The latter was seen by the Commission as important for assigning TSOs with European network code development, because the Commission did not trust vertically integrated companies to draft neutral network codes. For a Commission interested in market integration, it would not be rational to have vertically integrated companies drafting network codes. Mandating TSOs with network code development was therefore linked to ownership unbundling as suggested for the Electricity *Directive*. Thus, the Commission was instrumental in delegating this task to unbundled TSOs, because this was more rational given the goal of integrating national electricity markets.

Nevertheless, the Commission *did* allot a role for itself, in line with its *first* preference and institutional self-interest: It would be involved within the early (priority-setting) and final stages (comitology) of the procedure. Moreover, the Commission reserved the right to take over ENTSO-E and ACER tasks if these were to fail to deliver on time. This 'safety mechanism' would enable the Commission to step in and ensure EU-wide harmonization in case of such non-compliance. This was a rational measure in light of the Commission's dissatisfaction with the lack of speed in voluntary harmonization. A consequence of its self-interest, the Commission had given itself a strong position regarding regulatory oversight in the procedure, with the input of national regulators or an EU-level regulator being of an advisory nature. The Commission, then, did not prefer to participate in the actual drafting of network codes, but envisaged itself having a role within the beginning and at the end of the procedure. This was a rational strategy, giving the Commission influence without having to spend resources on the actual drafting. This made the Commission suggest a procedure in which TSOs, based on priorities drafted by the Commission, would make the network codes that could be made legally binding through Commission-initiated comitology.

5.1.3 Parliament wanted a stronger ACER

EP was generally supportive of the Commission's proposal. However, it wanted to make some key changes pertaining to regulatory overview. First and foremost, it wanted to strengthen the role of national regulators acting through an EU body (ACER) in the procedure. Thus, it was rational to suggest *binding* framework guidelines, which, as legally binding would likely have to be publicly available, thus ensuring transparency. Moreover, increasing the role of ACER would have the effect of reducing the influence of the Commission within the NC procedure. This means that Parliament was concerned about regulatory oversight, as expected, but that it wanted another EU-level body (ACER) to be responsible for this – its expected *second* preference. Moreover, this indicated a concern for relative power, in that the influence that would be given to national regulators or ACER would come at the expense of that of the Commission – a more powerful Commission could have implications for the inter-institutional relationship between the Commission and Parliament. Thus, the influence of the Commission within the procedure was sought reduced by Parliament.

5.1.4 Member states wanted a weaker ACER and less comitology

For EP's amendments to be sustained, they would need the member states' support. In the Council readings, member states concentrated on the more 'political' issues, regarding the Electricity Regulation as more 'technical'. Moreover, in a rational effort to protect national sovereignty, a clause was inserted underlining that network codes would apply to *cross-border* issues – by definition not interfering with national markets. Thus, the terminology and this legal clause imply a low distributional conflict, which is consistent with previous research (Kelemen & Tarrant 2011: 932). Nevertheless, the power-oriented perspective would still expect member states to be engaged in discussions on issues of low distributional conflict, tolerating delegation to a single EU-level body (rather than a looser network, as expected in the case of a higher distributional conflict) as a rational step ensuring needed coordination and credible commitment.

In this case, however, the member states were less involved, concerned as they were with other more salient issues like unbundling. However, member states had already shown their support of what would eventually become ENTSO-E *prior* to the formal proposal was on the table. Additionally, during the legislative process, the member states discussed the role of

ACER and comitology in general – both aspects that have implications for the procedure for network code development. Member states had different preferences on ACER, but agreed on establishing this single EU-body, as supported by the Commission and Parliament. Nevertheless, due to diverging interests, the member states supported neither a stronger ACER nor binding framework guidelines. The Commission, having written an opinion on Parliament's suggested amendments, also responded negatively to this, stating that it was legally unviable. Non-binding guidelines were however supported by the Commission. This could be understood in light of the Commission's interest in getting its proposal enacted, which could be achieved by facilitating agreement and compromise between Council and Parliament. While sufficient member state support could be established for non-binding framework guidelines, this became part of the NC procedure.

Comitology was also discussed, with member states having a general preference that this should be restricted to making implementation rules, and not to make general rules – network codes would be located in the latter group. Despite the goals of comitology being to ensure member state control of implementation of EU legislation at a lower level of detail, Parliament and member states were concerned about the extent of comitology. The reason is that the Commission arguably has a larger influence within comitology than within the co-decision procedure. Thus, the contours of institutional self-interest on behalf of all actors are revealed here: making general rules within comitology could give the Commission more relative influence, which neither member states nor Parliament were interested in. Nevertheless, given the level of technical detail, member states were not interested in the alternative to comitology: discussing this in inter-institutional negotiations with Parliament and the Commission. Thus, member state and Parliament's interests did not exist in a vacuum, but were rather seen in relation to the use of limited time and resources. Moreover, the inclusion of framework guidelines would reduce the role of comitology within the procedure, thus reassuring member state concerns for too much comitology. Because EP had attained a role within comitology following the previous comitology reform, and because it was reassured by the Council's acceptance of framework guidelines – although non-binding – it could support the proposed comitology. The acceptance of Council and Parliament on this was instrumental in retaining comitology in the procedure for developing network codes. See figure 5 for a list of factors that reduced in particular member states' concern for distributional implications of the NC procedure.

Member states could support the compromise reached between the Commission and EP
Non-binding framework guidelines reduced the extent of comitology
Network codes regarded as having low distributive implications
Member states were reassured because network codes would apply to *cross-border* issues
Framework guidelines would be made by an ACER controlled by national regulators
Network codes would be made by an ENTSO-E controlled by national TSOs
Commission would remain in the background *unless the former two organizations could not agree*
National representatives could control the Commission within the comitology stage

Figure 5: Factors that contributed to Council support of the procedure for developing network codes.

Reassurance had also been provided to member states by the cross-border clause (mentioned above). This could be utilized by member state representatives in order to contest a given network code. However, in practice the burden of proof would be on the member state representatives rather than on the Commission: during comitology, the argument would have to be made that a given network code is *not* cross-border instead of the requirement that it *is* cross-border. If separating between the national and the cross-border of transmission networks in Europe were an easy task, this would have fewer implications, but as confirmed by informants as well by previous literature (Squicciarini et al. 2010: 13), such a distinction is hard or impossible to make. As the usage of comitology was accepted by the member states, however, this remained part of the procedure.

5.1.5 Conclusion of the power-oriented analysis

As a result of the broad consensus that TSOs would draft network codes, conflict of interest regarded the role of ACER, and the extent of comitology. On binding framework guidelines and the role of ACER, disagreement existed between, on the one hand, the Commission and Council, and Parliament on the other. Unable to muster enough support, Parliament had to drop the 'binding' in binding framework guidelines. Comitology, however, gave rise to a different constellation of actors, with the Commission on one side, and Parliament and member states on the other. Comitology openly concerned the institutional balance of power, as a substantial set of rules would be treated through comitology rather than through inter-institutional negotiations. Nevertheless, the Commission was able to gather sufficient support to its position due to two factors: *de facto* reduction of comitology by acceptance of the amendment of (non-binding) framework guidelines, and the level of technical detail in network codes. Linking comitology and framework guidelines allowed for a compromise

among the actors, which was necessary in order to muster sufficient support as necessary for adopting the NC procedure. Thus, the adoption of the NC procedure as well as its specific allocation of tasks and responsibilities can be traced back to the interests of the actors considered here (Commission, Parliament, member states).

5.2 Historical institutionalism

Historical institutionalism – as presented in chapter 2 – takes a temporal perspective, and regards outcomes as caused by an initial decision(s) constituting a critical juncture. This sets developments on a path, on which it remains due to positive feedback. Path-dependency eventually brings about the outcome to be explained. This process of cause and effect is moreover located in – and thus influenced by – a greater social context where external events unfold. A critical juncture is defined through the presence of new and other feedback effects – thus creating legacies. For the old path as well as for the emerging and new one, three operationalized indicators for positive feedback will be identified, with positive feedback located in a larger context of sector-specific reform. It is via these mechanisms of positive feedback that the critical juncture can cause the outcome.

The first group of positive feedback mechanisms comprise of distribution effects, which concern changes in the distribution of formal influence. The second group consist of coordination effects, specified as the support of (vested interests) and resource usage on institutions by actors that are empowered by distribution effects. In the following, an account of this path-dependency will be presented in a chronological order. Here, a switch from a decentralized towards a centralized path is identified. Decentralization entails that the individual organizations engaging with transnational institutions (cross-border cooperation between non-state actors) are ensured a high degree of autonomy. Opposite, centralization reduces the influence of individual organizations, because an individual organization can be overruled. It should be noted that the temporal delimitations of the sections below are approximate.

5.2.1 Path of decentralization (prior to 1986)

Based on the previous chapter, cross-border cooperation during the pre-liberalization period represented a path-dependent decentralism. This path developed in the context of post-war

reconstruction and national electricity systems.[49] The influential organizations during the pre-liberalization period were vertically integrated companies. This affected the subsequent development of cross-border cooperation. Nationally oriented organizations supported decentralized cross-border cooperation (van der Vleuten & Lagendijk 2010). At least since the 1950s, vertically integrated companies had cooperated on cross-border electricity flows within regional associations and/or bilaterally. This cooperation, moreover, did not aim to increase competition nor integrate national markets, but was established for purposes of ensuring stability of system operation and security of supply.

As a result, transnational cooperation on cross-border electricity exchange that emerged during this period followed this path-dependent development, because actors with production interests controlled the transmission networks.These organizations had vested interests in decentralized systems of cooperation in order to retain control of their respective national markets. This fed into the existing transnational cooperation, which was kept at a minimum, and allotted with relatively modest resources compared to the use of resources on national matters. That most resources were used nationally reinforced the national orientation. Subsequently, the relatively low cross-border activity contributed to reinforcing this decentralized path and the national orientation of these organizations.

5.2.2 Critical juncture: Initial decisions (1986-1996)

During this period, developments were set on a different path, pointing in the direction of more centralization. The first half of this period was contextualized by a momentum from the general single market initiative. Later, the end of the Cold War allowed for expansion of the UCPTE synchronous zone (the later UCTE zone) to Southern and Eastern Europe. The context, then, was permissive to centralizing tendencies. Within the EU, the influential organizations at this stage were the Commission and the Council. Parliament mainly had a consultative role. With the goal of an internal electricity market in Europe, the Commission had sought to stake out a rather ambitious path, which however had been met by resistance in the Council. Emerging from prolonged negotiations among these, an approach was established: energy market legislation would be developed incrementally, yet existing voluntary decentralized transnational cooperation could be enhanced. The former reflected

[49] For a historical account, see van der Vleuten and Kaijser (2006).

member states' concern for national sovereignty, whereas the latter had started out as an attempt by the Commission to push for more ambitious legislation by seeking to facilitate progress in attaining consensus through bottom-up processes in which it addressed the industry directly.

The compromise, a combination of incremental legislation and voluntary transnational cooperation, would affect subsequent developments: Here was a scope for action that the Commission wanted to exploit in order to push for more top-down legislation, but whose effect would take perhaps unintended twists and turns. The combined approach represented a critical juncture that changed the direction of the path in a more centralizing direction. This would eventually bring about the NC procedure in its particular form, notably centralized outside the formal EU apparatus. This critical juncture stretched out in time: energy market integration had been discussed since 1986. The end of the critical juncture is difficult to date precisely, but at least the first electricity directive in 1996 marks its definite end. This was idenfied as a critical juncture because of its observed effects in terms of new and different mechanisms of positive feedback.

5.2.3 Emerging changes due to positive feedback (1997-2006)

However, given the nature of critical junctures and positive feedback, the changed course would need time to become manifest in institutions. In early stages of a sequence, then, decentralized cooperation would still be in place. Subsequently, due to positive feedback, this would start changing. National electricity systems were affected by the reform effort of energy market liberalisation, where the notion of competition and economic gains created a context in which economic interest in cross-border flows became salient. Different price of electricity across the member states created economic incentives for trade, whereas competition reduced the incentives for investing in infrastructure. Whereas trade favoured an integrative and centralizing direction, and reduced infrastructure investment upheld separation of national systems. At the very end of this period, moreover, a European blackout occurred in 2006, having been preceded by a blackout of smaller geographical scope in 2003. As will be shown below, liberalisation and the blackouts would strengthen a centralizing path.

Distributive feedback effects: Structural changes within member states

Mandated specialization followed from the liberalisation effort. EU energy market legislation incrementally posed stricter requirements for unbundling between production and transmission (horizontal specialization within the industry); and independence of national energy regulators from industry and national governments (vertical specialization within government). This incremental legislation constituted the top-down-part of the critical juncture. It should be noted that this was also supported by reforms initiated at the national level, which however pointed in the same direction. A development towards unbundling had started with the requirement for unbundling of accounts in the first package, and was reaffirmed with the second package, which required legal unbundling. However, close ties and in practice vertical integration remained in place in several member states, changing more slowly. Nonetheless, in general the outlook was changing, because production interests were waning, becoming relatively less important with each step towards stronger unbundling, and transmission interests thus waxing, becoming relatively more important. This structural change contributed to reducing the influence of production interests, which was important for the decentralized path-dependency.

National energy regulators were emerging as separate entities from national governments, a development that was reaffirmed with the second package, where the function of regulatory overview was to be placed in an organization that was separated from the more political decision-making within national ministries – a change that has been prominent in many other sectors (Christensen & Lægreid 2006a). While independent from the industry, however, the degree of independence from national governments differed, as many sector departments retained formal power over their regulator. Nevertheless, the political influence on regulatory overview was, relatively speaking, reduced. This contributed to reducing the relative influence of national governments, whose concerns for national sovereignty was important for the decentralized path-dependency. Thus, the incremental legal changes following from the critical juncture triggered changed outlooks.

Coordinative feedback effects: New outlooks within transnational institutions

These two processes of structural change reinforced the centralizing path, because the changed landscape of organizations at the national level fed back into the institutions for cross-border cooperation. Thus, distributional changes were decisive for preparing the scene

for the NC procedure: National regulators as separate and independent entities had come into being, and TSOs were becoming increasingly separated from producers. This consequently started affecting the vested interests of these actors as they were engaging within transnational associations. The character of regional associations like UCTE and Nordel changed as they were redefined as *TSO* associations (in 1999 and 2000, respectively). Moreover, further reinforcing centralization, a TSO association on the European level was established for market issues (ETSO). Towards the end of this period a changed position among TSOs was emerging, with an increasing willingness to engage in cross-border matters, which prepared the ground for the path of centralization.

Coinciding with the restructuring of transnational TSO associations was centralization among associations for cross-border cooperation among producers, seen with the merger of UNIPEDE and EURELECTRIC (1999). Notably, distribution networks, to a lesser extent subject to unbundling requirements, were part of the new European producer association (Union of the Electricity Industry-EURELECTRIC). This illustrates how the changes among transnational associations were directly linked to the structural changes occurring at the national level – this reflects a path-dependent development. Rather than supporting the old cooperative organizations, the existing regional associations were redefined, and new associations moreover established. Such a change in terms of vested interests indicates a change in the positive feedback, thus indicating that a critical juncture had indeed taken place.

The emergence of national regulators also fed back into cross-border cooperation among these as an advisory EU-network of regulators (ERGEG) was established by the Commission. Nonetheless, signs of the old path can be recognized: ERGEG did not have the competence to make binding decisions on cross-border issues because national governments had not delegated such powers to the EU-level. Nevertheless, the vested interests of organizations were adjusting according to the new path, as the transnational associations reflected the structural changes in organizations at the national level. This illustrates mechanisms of positive feedback, because the structural changes at the national level had started changing the outlook of the organizations participating within transnational association that subsequently were redefined. This would paved the way for a more centralized path.

The creation of European associations moreover strengthened the role of the Commission. Having played a central role in facilitating their emergence, the Commission had carved out an institutional involvement for itself on a regular basis: The Commission participated in

ERGEG, met with ETSO, and organized Florence summits. As a result, the structural changes had affected vested interests, which changed the landscape of transnational associations – and this produced a distributive feedback effect in terms of giving the Commission a role. Nevertheless, the new associations remained decentralized in their respective structures, indicating that it was still early in the sequence.

Moreover, in terms of resource usage, neither TSOs nor national regulators were using much of their capacity on cross-border issues, focusing rather on their national markets. Thus, large shares of their capacity were being used on matters that did *not* entail cross-border cooperation. For national regulators in particular, this was also the result of a lack of competence for making binding decisions within ERGEG. For TSOs as well as regulators, then, the effects of the old path could still be observed, indicating that this was relatively early in the new path-dependent sequence initiated by the critical juncture. The Commission, on the other hand, was directing relatively large resources towards carrying out investigations and making benchmarking reports identifying shortcomings of the existing regulatory framework. Thus, the Commission's resource use had shifted according to the new path, indicating that the developments were occurring faster here, which would contribute to strengthen the centralization path.

The vested interests of the Commission were moreover affected by its interpretation of the blackouts, reaffirming its support of centralization. This made the Commission see the need for better cooperative schemes among TSOs. Other informants did not note these blackouts, and while memory could have played a role here, it could also have been differently interpreted. Logically, then, the blackout was more likely to have influenced the Commission's evaluation of the current state of affairs in a negative direction than for actors who did *not* share this interpretation. This is confirmed by previous research on the 2006 blackout (van der Vleuten & Lagendijk 2010). As a result, this strengthened the latter's stated support of a more centralized cooperation among TSOs. Moreover, although the Commission preferred more supranational solutions even prior to the blackout, this crisis strengthened the direction set by the new path. As such, this is a crisis whose effect differs from that often expected within historical institutionalist research. Instead of undermining an existing path-dependent development, in this case it contributed to strengthening one that was already emerging following the occurrence of a critical juncture.

The incremental changes in legislation had brought about new constellations of organizations, which opened the dynamics within transnational cooperation to change. Without these changes in the actor landscape, the TSOs and the national regulators that would constitute the later ENTSO-E and ACER would not have been available to play a key role within the new NC procedure. Moreover, cooperation on cross-border electricity exchange displayed path-dependency because distribution effects influenced the vested interests (coordination effects) that fed back into the system. This consequently kept developments on the path of centralization.

5.2.4 Path of centralization (2007-2009)

The consolidation of the new path occurred in a context of heightened attention to climate change and sustainability, which went together with a growth in electricity production from renewable energy sources that brought intermittency – due to natural fluctuations – already noticed by the TSOs operating the transmission networks. This context would facilitate the path of centralization, because it increased the need for coordination.

As a result of the new transnational associations, national regulators and TSOs had had the chance to do some first experiences within EU-level associations like ERGEG and ETSO, respectively. TSOs had made experiences with negotiating on voluntary recommendations, where the challenge of ensuring credible commitment and compliance made them welcome the idea of network codes becoming EU law. Moreover, because it could now coordinate with a lower number of associations due to this centralization, this favoured the position of the Commission of integrating as the expense of member states' scepticism of this.

As the Commission tabled a proposal, then, the TSOs subsequently supported it.Not only did the proposal allow TSOs to continue making the network codes themselves, thus retaining an element of decentralism – but these would become binding, thus alleviating TSOs of efforts for ensuring compliance themselves. Bindingness as EU hard law implies centralization because it reduces the individual influence of TSOs in deciding on a course of action. Thus, the vested interests of TSOs had been subject to positive feedback from the critical juncture: Following EU-legislation, structural changes at the national level fed into existing and new transnational associations, which subsequently shifted the vested interests of these into supporting centralization to the gain of collective power and bindingness at the expense of individual autonomy as within the old path of decentralized cooperation. Moreover, this direct

empowerment of especially TSOs can be interpreted as the outcome of a chain of events following the critical juncture: now, enhanced bottom-up transnational cooperation would become centralized with top-down legislation.

National regulators and market actors had in the past supported the decentralized model. The former as part of national governments, and the latter as part of vertically integrated companies. The European associations of both, ERGEG and EURELECTRIC, respectively, did not respond to the proposal by defending the existing decentralized model, but rather lobbied for strengthening ACER, which indicates a step in the direction of centralization. Affected by the increasing impact of unbundling, EURELECTRIC's producers and suppliers ('market actors') had interests increasingly diverging from those of TSO – although, given the initial starting point and the uneven progress in unbundling across member states, overlaps in ownership and interests still existed. Nevertheless, that EURELECTRIC regarded TSOs as partial and diverging from those of their members is a strong indicator of just how much had changed from the days of vertically integrated companies. Now, rather than backing the TSO position, EURELECTRIC instead supported the position of ERGEG and CEER that network codes should be subjected to regulatory overview by national regulators. This alliance is path-dependent because it follows from the structural changes that had occurred earlier in this path-dependent sequence. Now, the conflict lines had shifted to intra-sectoral ones, rather than the previously more relevant national ones.

5.2.5 Conclusion of historical institutionalism

Thus, the adoption and shape of the NC procedure was the eventual outcome of a critical juncture. This is also an account of resistance to change, because change only arose when the mechanisms of positive feedback changed, which signalled that a critical juncture had taken place. The critical juncture, moreover, was the initial approach taken to internal energy market within the EU: an incremental top-down combined with expanding on voluntary transnational cooperation. The shape of the NC procedure reflects the localization in a path-dependent sequence. Not long after the critical juncture, it was enacted at an intermediate (if not still fairly early) stage of the sequence. As a result, while positive feedback has influenced the procedure in a more centralized direction, clear signs of the continued presence of decentralized elements can be identified, cf. figure 6.

Decentralized	Centralized
Regional cooperation sustained…	…yet carried into a single TSO association
Internal ENTSO-E processes not regulated by EU law	…although EU is to give an opinion on it
ACER governed by a board of national regulators with a seat each, voting with absolute majority	Absolute majority, while less centralized than simple majority, is still a majority vote
Framework guidelines will be non-binding	Framework guidelines will guide network code development
Network codes do not necessarily become binding	…but they can be, and TSOs favour binding codes
Network codes are *cross-border* codes	Network codes will also be *common.* And distinction between cross-border and national hard to establish – burden of proof to argue that something is *not* cross-border

Figure 6: Decentralized vs. centralized elements in the procedure for developing cross-border network codes.

Summing up this perspective, it is found that the industry's voluntary cross-border cooperation had been developing in a path-dependent way. Vested interests in a decentralized model of cooperation pointed in the same direction as member states reluctant to delegate power in energy matters to the EU-level. Nevertheless, the critical juncture that triggered incremental legal changes and efforts at enhancing the voluntary cooperation over time shifted the path towards centralization by introducing a different dynamic in the mechanisms of positive feedback. Triggered by the initial EU approach to regulating on energy market issues through a combined approach consisting of imposing incremental liberalisation legislation within member states from above, while buttressing transnational cooperation from below, this had led the following: a procedure in which non-state actors – TSOs and national regulators – through their respective transnational associations became part of a part of a "multilevel Union administration" whilst remaining part of the national one, thus becoming "double-hatted" (Egeberg 2006b). The structural changes moreover changed the dynamic between actors. Specialized either vertically (industry) or horizontally (industry), this gave rise to new conflict lines at the national level, which through the transnational associations also would take place at a European level, thus changing the dynamic of intergovernmental relations.

5.3 Sociological institutionalism

From the sociological stream within institutionalist theory, mimesis was picked for explaining the NC procedure, motivated by an interest in tracing the origins of the specificities in terms of institutional *shape*. Organizations seek legitimacy from their organizational field, thus

imitating practices that are positively evaluated. A practice can spread as a trend or fashion within this organizational field. This is in particular expected to influence behaviour in a situation characterized by uncertainty and/or dissatisfaction with existing policy. Specifically, this perspective analyses the comparisons that the Commission made when drafting the proposal for the procedure. Moreover, with amendments being made during the subsequent readings in Parliament and Council, the origin of these revisions will subsequently be analysed. First, however, a brief look at comparisons drawn in the past.

5.3.1 From special to one of the networked ones

Prior to the first package, electricity was treated as 'special', a categorization that would start changing gradually as liberalisation and competition was introduced to the electricity sector. Starting with the idea of an internal *energy* market, this was drawn from the general internal market. From the start, moreover, legislation for the two sectors of electricity and gas, respectively, developed in tandem, with parallel legislative acts in the three packages. Although some differences existed, the principles to a large extent corresponded. Moreover, during this period the Commission drew inspiration from similar sectors (other 'utility' sectors) like telecom and civil aviation, but also from 'early movers' among the member states like the UK and the Nordic countries that had already liberalised their national electricity markets. Subsequent legislation also to a large extent drew on the internal market and competition principles, e.g. that access to cross-border networks should be granted through *market*-based methods (EU 2003). Thus, models from similar sectors were utilized, perceived as similar due to the common trait of being network-bound (i.e. transport of the given good/service being dependent on infrastructure), with sectors like energy and telecommunications representing "sectors close to the state" with a history of self-regulation (Mayntz & Scharpf 1995). The model of liberalization, moreover, reflected a major trend at the time as part of the New Public Management representing a package of: "Structural disaggregation, autonomization, agencification, devolution, deregulation and market competition" (Christensen & Lægreid 2006b: 3).

The Commission was not content with the existing cooperative schemes, regarding harmonization as proceeding too slowly, and considering cooperation insufficient for an increasingly complex sector. As the second package entered into force, the Commission had signalled its dissatisfaction with the status quo: existing legislation was too weak, and many

member states had failed to implement it. However, not previously regulated in a formal EU procedure, making a formal *procedure* for common network code development would represent a new step. Thus, there was some uncertainty as to how this should be done, thus giving rise to the expectation that inspiration and comparisons were found within the organizational field, where imitation of models could impact the procedure for network code development.

5.3.2 Existing practices and other network sectors

In the following, the different parts of the NC procedure *as initially proposed by the Commission* are traced back to their origins, showing how carriers facilitated diffusion by imitation. The proposed ENTSO-E was to build on existing cooperation, indicated by the referral to this as the *ETSO+* option. Existing routines for voluntary and regional TSO coordination on network codes served as a model for the new procedure. The Commission was familiar with these routines through its meetings with TSOs and their associations within the framework of the Florence Forum. Through such direct relations, then, routines serving as models could travel, thus explaining the major role allotted to TSOs within the formal EU procedure on network code development.

This was also affected by framing: It was communicated that existing cooperation could be carried over into the new arrangements (e.g. regional groups within ENTSO-E), which thus contributed to sustaining the role given to TSOs within the formal EU procedure, because this new procedure was inspired by existing practices. This is also a message that had been conveyed from the TSOs to the Commission prior to the making of the proposal. Here, a connection was made between the role of TSOs regarding national transmission networks and their role in developing the national market on the one hand, and cross-border transmission networks operated by TSOs which could give TSOs a role in developing a European market on the other hand. The suitability of this is indicated by the Commission representative's referral to TSOs drafting network codes as a 'pragmatic approach' – it might not be ideal, but it is adequate. Consequently, it became part of the procedure formally tabled by the Commission. Thus, this means that the an existing model of self-regulation prevalent in this sector converged with the newer trend of autonomization and agencification, as a separate body would make general and binding laws (although it would have to be approved within comitology).

The shape of regulatory overview, of which ACER would be part, for the network code procedure was laid down in the proposal for a new Electricity Regulation, but the shape of the new EU-level regulatory agency was also laid down in the ACER Regulation. For ACER, a number of comparisons were drawn: These represented different models of European networks or groupings, but were found to be unviable in light of legal constraints or the goals to be achieved by establishing a new EU-level body. On this basis – this is how it is presented in the impact assessment – the Commission concluded that a regulatory EU agency would be the suitable solution. Moreover, a viable comparison was found within the railway sector. A Commission representative had referred to the European Railway Agency as serving as inspiration for what would eventually become ACER. A brief look at the European Railway Agency reveals a number of commonalities with the electricity sector. The decision to establish such an agency was taken in 2004, and since 2006, it has been fully operational. In both sectors, infrastructure plays a pivotal role, transporting goods via networks (although few people travel by electricity networks, in contrast to via railway networks, one should add), and operating the system in a safe way is an important task. The Railway Agency, moreover, is tasked with facilitating cross-border transport by harmonising technical standards (EUROPA.eu 2010). Interoperability between the national networks, then, is the goal for the Railway Agency as would be the goal for the future energy agency. Travelling via the carrier of symbolic systems, the railway agency was theorized by generalizing its tasks – a functional definition pertaining to task of regulatory overview – thus enabling it to serve as a model that could be applied elsewhere.

Moreover, at the time, the two kinds of sectors, energy and transport, were still organized within the same Directorate-General in the Commission (DG TREN). Thus, individuals working with the two sectors were colleagues, and were working in the same building at the time. This facilitated an understanding of similarity, as well as direct meetings and social ties among individuals thus working within the same building. As such, the relational systems carrier was available. Within this relational system (DG TREN), moreover, models utilized were available, as individuals working with energy could look to transport for practices. As a result, the railway agency offered a theorized model from a sector perceived as similar, and this model was imitated within the electricity sector, resulting in ACER. This meant that a model was not found within the organizational field of the Commission, but rather *within* it. Moreover, this was not from another DG, but from the same DG TREN in which energy was organized.

Regarding comitology, inspiration had been drawn from the telecom sector, which illustrated how such detailed technical rules could be made legally binding, thus providing a model for how it could be done. Comitology within the telecom sector was moreover regarded as having delivered results. Further, pertaining to the legislative output resulting from comitology – binding codes – comparisons were also drawn to the railway and aviation sectors, respectively, looking at rules for airport safety from the latter. Thus, existing models that were *sufficiently general* (i.e. theorized) in sectors that were *perceived as similar*, practices could be imitated. Moreover, these were deemed worthy of copying – imitating – because they were regarded as having produced good results. Making detailed rules binding through comitology as within these similar sectors, then, was deemed not only possible, but also attractive. As a result, this imitation influenced the comitology step within the network code procedure. Here, then, a model from a different DG, yet one also belonging to the Commission was used.

5.3.3 A model for division of labour

As the proposal moved from the Commission to Parliament, the organizational field changed somewhat. No longer within a context of the EU's executive branch, it had now moved to realm of party politics of the European Parliament. The major amendment suggested – with implications for the extent of comitology, as noted earlier – was the concept of framework guidelines. This was proposed by a Parliament concerned with legitimacy, thus representing an organization promoting a norm as depicted in Finnemore (1993). The legitimacy-based motivation behind Parliament's behaviour is indicated by its regard of the influence envisaged for TSOs in the procedure as too large and inappropriate. An appropriate division of labour, on the other hand, meant that regulators, not companies, should carry out regulatory tasks, i.e. rule-making. The characterization of this as a 'natural' division of labour implies a taken-for-granted-ness indicative of the cognitive understanding of institutions. Thus, Parliament's concern for a suitable specialization between ACER and ENTSO-E reflected a theorized model. As a theorized practice, this model had originated at the national level, yet diffused to the European level: enhancing the role of ACER (amongst others by means of framework guidelines) was seen as corresponding to the model found on the national level. Moreover, Mogg (head of ERGEG and CEER) had stated that a stronger ACER was required in order to safeguard the 'public interest' – an argument associated with practice at the national level as well as indicative of the legitimacy of this model. Additionally, initial EU-level application of this model could be identified: National regulators had already been making guidelines within

the Florence mini-fora and ERGEG. Additionally, direct relations among John Mogg and EU officials provided a relational link that facilitated this exchange of ideas. This might have strengthened the cause for framework guidelines that subsequently were promoted by Parliament.

5.3.4 Conclusion of sociological institutionalism

This case shows that the more appropriate organizational field might be network sectors in general rather than other DGs, or other organizations within the same sector. This indicates that the concept of an organizational field is fuzzy, because delineating what constitutues such a field is not obvious, but might vary from case to case. This highlights the importance of at least complementing the notion of an organizational field with that of relational carriers, where perceptions of similarity can stretch across sectors. In this case, then, models from other network-sectors were imitated, notably from railway (regulatory agency), telecom (comitology) and aviation (network codes). That models from similar sectors served as inspiration is consistent with Pollitt (2012 - forthcoming), who singles out the airline and railway sectors, respectively, as having served as models for energy sector liberalisation. Within the two former sectors, deregulation that had occurred at an earlier point in time was perceived as 'successful' (Pollitt 2012 - forthcoming: 2). Thus, the Commission had perceived practices within these sectors as appropriate models that moreover were applicable. Here, then, a perception of similarity (relational system) was an important carrier for generalized models from these sectors to the electricity sector, which influenced the procedure for network code development. The clearest indication of mimesis is found for ACER, which imitated the railway agency.[50]

Nevertheless, still indicated is that the context in which imitation occurs could affect the sources of emulation. As the context changed from the Commission to Parliament, models were to a larger degree drawn from national regulatory arrangements within the same sector than from European regulatory arrangements within other sectors. Here, an 'agentification trend' had emerged especially since the 1980s, entailing the establishment of regulatory agencies for carrying out the administrative part of executive politics at "an arm's length from political considerations" (Martens 2006: 126). ENTSO-E and ACER both reflect this trend.

[50] It is therefore surprising that alternative models for regulatory overview deemed unviable were expressly mentioned in the impact assessment, whereas the model evaluated as suitable was not.

These two bodies were mandated with rule-making (although ACER's framework guidelines would be non-binding) that would take place *outside* the legislative process within the EU that would involve Council and Parliament. Moreover, in both cases, the organizations represented within ENTSO-E and ACER were TSOs and national regulators, respectively. These organizations at the national level have also increasingly become independent from national governments. As such, the general fashion found within the organizational field served as a model subsequently imitated.

Nevertheless, the NC procedure resembles a bricolage because it reflected the imitation of different models, drawing on different practices, cf. figure 7.

Model	**Copy**
Railway agency had a larger role in code drafting	For ACER a more advisory role was proposed – with code drafting remaining with the TSOs through ENTSO-E. Double system as innovation
Division of labour at the national level: national regulators, while less involved in the operative part of cross-border transmission, would at least in some member states be able to veto the equivalent of a network code through their regulatory oversight over their national TSO	This option was not available for ACER vis-à-vis ENTSO-E

Figure 7: Models and imitations within the procedure for developing network codes.

5.4 Drawing the perspectives together

In this section, the complementarity and contradictions in the explanations of power-oriented, historical and sociological institutionalism will be considered through their combined effort at explaining that the NC procedure in its particular form. Here, I will look into how they interact with one another, and evaluate whether or not this contributes to a deeper understanding. Whether or not the complementary evidence represents a necessary or sufficient explanation of the outcome will be treated (George & Bennett 2005; Ragin 2000). For the analytical assessment announced in chapter 3, necessary factors entail that this specific procedure would not have been enacted *without* their presence, requiring in addition that these – or their totality – are sufficient. Moreover, an evaluation of whether or not a different outcome might have been consistent with the presence of these factors – in part a matter of sufficiency, as factors might be necessary without being sufficient, thus making it

possible that another outcome might have occurred *despite the presence* of the causal factors, if only necessary and not sufficient.

At its most basic level, the procedure would not have been formally enacted had it not – as explained by the power-oriented perspective – been proposed by the Commission, and gained the support of EP and of the Council. Regarding the latter in particular, the member states would not have supported this procedure if they had perceived of it as contrary to their interests. An indicator of this is the attempt by EP to introduce binding framework guidelines, which due to a mixed reception among the member states was subsequently dropped (although non-binding ones were sustained). While necessary, in isolation this offers a rather thin account as to why the procedure was enacted in its particular shape, making it insufficient. Moreover, the Commission's proposal remained largely unchanged – with the noted change pertaining to framework guidelines, as well as other minor revisions – until its adoption, which also is not explained. If the Commission had anticipated the positions of the other two EU organizations as part of a rational strategy aimed at getting its own proposal enacted, this does not explain why it had *not* taken them for regulatory overview, on which discussions did occur. More importantly, it does not account for the particularities within the NC procedure.

Here, then, the historical perspective provides a deeper and complementary explanation. The reason why the EU could and would pass this procedure in its particular version, as well as why TSOs and national regulators were available and willing to partake in it, is seen as structural. The NC procedure ensued from a critical juncture constituted by an early de facto compromise between the Commission and Council: a combined approach was taken by the EU in energy market regulation, consisting of incremental legal changes and buttressing voluntary transnational cooperation. While the isolated historical analysis pointed to this critical juncture as a cause that eventually brought about NC procedure, combining the historical perspective's account of the new actor constellations that had emerged with the power-oriented perspective's take on interests and influence, a stronger account is offered.

While the power-oriented perspective regards the major EU bodies as the actors, it does not exclude the option that these might have been lobbied by non-state actors. Superior expertise on network operation as well as organizing market exchanges gave TSOs leverage in the Commission's consultations prior to making the proposal. Given a strong cross-border European mandate, the TSOs supported this proposal. However, their actions under this

mandate could not be sufficiently controlled by national regulators, for whom no corresponding mandate had been foreseen. Thus, the Commission's proposal was decisive for activating national regulators. Seen through the lenses of relative power, national regulators were interested in retaining their relative position vis-à-vis TSOs. Market actors were equally concerned. As a result, these joined forces, and mobilized in order to amend the proposal. While interested in regulatory oversight, the national regulators did not have the technical expertise to draft network codes. As a result, neither national regulators nor market actors contested that TSOs should do this.

While a traditional approach to lobbying would expect non-state actors approaching their respective national representatives, in this case at least, the Council and the member states were evaluated as less receptive for lobbying efforts, because the member states were giving much attention to other issues within the third package that were more politically salient and had visible distributive implications. This means that the temporal co-occurrence of issues on the agenda influenced which EU body that the coalition sought to address – with member states busy, the coalition turned to Parliament. Evaluated as receptive to new input and as generally supportive of regulatory overview, Parliament was targeted for lobbying efforts.

Once mobilized, national regulators had the necessary expertise that enabled them to approach the political arena. This political knowhow stemmed from previously having been part of a sector ministry. This aided them in getting their voice heard in Parliament, to the effect that binding framework guidelines were included in Parliament's amendments. However, the Commission and the TSOs resisted the notion of ACER making binding framework guidelines. Given mixed views in Council, this was subsequently dropped, although a concession was made by including non-binding framework guidelines in the NC procedure.

Considering non-state actors lobbying the EU through their respective transnational associations reveals a stronger explanation of the specific allocation of roles to ENTSO-E and ACER than what is accounted for by considering the interests of the Commission, EP and Council, or the path-dependent development alone. Notably, the power-oriented perspective shows how, despite subject to similar structural developments, the TSOs were to a larger degree empowered at the European level within the NC procedure than what was the case for ACER – the member states differentiated among the two, regarding the distributional implication greater for the latter. This combined explanation offered by the power-oriented

and the historical perspectives appears necessary and sufficient, and given the presence of the causal factors noted here, it seems less likely that another outcome would have ensued.

While a historical account could have traced the division of labour at the national level to the structural changes, it does not explain why this coalition to such an extent were mobilized by the Commission's proposal. Adding the sociological perspective's notion of legitimacy could moreover explain the strong reaction by national regulators and market actors alike. National regulators and market actors alike interpreted the Commission's proposal as giving regulatory tasks to TSOs. This could be seen as representing a violation of what had been established as an appropriate division of labour within the energy sector, but also more generally, reflecting a broader trend. Triggering self-interest as well as concerns for appropriateness, the subsequent mobilization of national regulators and market actors becomes more understandable. Thus, the distinction between the two logics of action is not absolute in this case, which is a general problem noted in the literature (March & Olsen 2004). As the division of labour was a broader trend, moreover, this facilitated resonance among other actors to the cause forwarded by the coalition, and reduced opposition. Without the leverage provided by legitimacy, it seems less likely that the coalition would have been able to push through an amendment substantially increasing the role of ACER within the NC procedure.

6 Concluding remarks

In this final chapter, the main results are presented, followed by a deliberation on the methodological and theoretical choices taken in this thesis. The latter is due in order to evaluate the foundation on which the findings stand. Further, the implication that the findings could entail for further development of EU energy market regulation is elaborated, and the question is raised as to the effect on the pace towards the internal energy market. Finally, some lessons learned for the study of institutional change are offered.

6.1 Research question and main results

The research question addressed in this thesis is *why the procedure for developing network codes was enacted in its particular form*. As indicated by the presentation in chapter 1, an institutional approach was taken in this thesis. In chapter 2, three complementary theoretical perspectives were presented that would be applied. While this do not render an exhaustive explanation, it offers the possibility of a stronger account than what a single perspective could offer in isolation.

The power-oriented perspective expected the change and design of institutions to be the product of rational actors that had formal influence on the EU legislative process, and that acted on given preferences. The historical perspective addressed the effect that initial choices constituting a critical juncture could have on later developments, and expected mechanisms of positive feedback to produce incremental adjustments that would eventually bring about the outcome of interest. Finally, the sociological perspective expected institutional change to be interrelated with conceptions of legitimacy existing within organizational field, where individual organizatons would adjust through imitation.

The separate analysis from the power-oriented perspective found that this particular procedure for developing network codes (NC procedure) was found to follow from the interests of the Commission, European Parliament (EP) and the member states of the Council. The need for compromise between the supranational preferences of Commission and EP, and the national ones of member states, resulted in the delegation to separate bodies consisting of non-state actors. Moreover, the inclusion of non-binding framework guidelines represented a

compromise between the Commission and the member states one the one hand, and EP on the other hand.

The historical analysis traced the origin of the NC procedure back to the initial compromise between the Commission and Council: energy market regulation in the EU through incremental top-down legislation and enhanced voluntary transnational cooperation. This represented a critical juncture because it changed the mechanisms of positive feedback, which shifted a path of decentralization towards centralizatin. Enacted relatively early in this new path-dependent sequence, the NC procedure displayed elements of new and old paths alike.

The analysis from the sociological perspective found that practices were imitated from other network-bound sectors such as railway and telecom. Moreover, as the proposal shifted to the next step in EU decision-making, the organizational field shifted, facilitating imitation from the national level. An agencification trend spanned the different organizational field, buttressing imitation going in this direction. Combining different models in a bricolage entailed innovation.

In the combined analysis, an important finding in this study was the decisive role played by non-state actors for the specific allocation of roles and tasks within the NC procedure. Leverage provided by information asymmetry gave the TSOs a major role in the procedure, however with the concession that their allotted drafting task became mandatory and subject to deadlines. Moreover, that network codes could become legally binding through comitology was welcomed by the TSOs because it alleviated them of having to impose compliance themselves. Moreover, this set-up served the Commission's interest in faster harmonization without having to use resources on the actual drafting itself. This proposal mobilized national regulators and market actors, who saw this as violating an appropriate division of labour. Motivated by self-interest, yet aided by legitimacy, this coalition was successfully able to push for the inclusion of framework guidelines within the NC procedure, although the interests of the TSOs, Commission and a divided Council prevented these from becoming binding for the subsequent drafting of network codes. While initially sceptical to the extent of comitology, the reduced role of this through the introduction of framework guidelines reassured Council and Parliament.

Moreover, these non-state actors had emerged through a gradual transformation, which represented vertical specialization within government, and horizontal specialization within the

industry. These changes fed back into their transnational associations, which were subsequently redefined. As networks rather than EU-level agencies as studied by Egeberg and Trondal (2011), their behaviour similarly diverges from an intergovernmental pattern, because they addressed the Commission and Parliament rather than their national governments. Equally caused through such feedback was a conflict line that was intra-sectoral more national. For ENTSO-E and ACER, to a larger extent representing agencies, it remains to be seen how they position themselves vis-à-vis the EU and/or the national governments – an interesting topic for further research. While the change of this procedural rule would probably not have been comprehended without the longer historical development, combining this with insights from the other two perspectives offered a substantially stronger explanation of the particular elements contained in the NC procedure. Thus, while the perspectives draw attention to different aspects of change, the combined analysis illustrated the benefit of a complementary approach.

Data from the different sources were cross-checked, and a largely compatible picture was rendered from the accounts made by different informants as well as by the documents. Two exceptions require some attention: according to a EURELECTRIC representative, this association was decisive for the mobilization of national regulators, whereas this was not emphasized by other informants. Moreover, as no formal interview was conducted with a national regulator, this was difficult to establish. This might signal positive self-representation at work, so while the account from the EURELECTRIC representative certainly seems plausible, this was downplayed in the presentation in chapter 4. A final note regards informants' view of particular (external) events. Probing for this without directly mentioning the 2006 blackout turned out to be difficult, yet fortunately previous research provided a better foundation for using these data in the analysis. The main picture rendered, however, was the same, which reduces the likelihood that data are biased.

6.2 Towards an internal energy market?

Non-state actors interacting at the European level could represent a challenge for national regulation. The regulatory gap – the lack of regulation of cross-border issues – has been reduced somewhat by institutionalizing self-regulation by TSOs that was made mandatory and subject to sanctions. However, the powers of ACER over ENTSO-E would be weaker

than those usually possessed by national energy regulators over their respective TSOs at the national level.

The establishment of EU-level agencies are expected to "contribute to an additional executive centre formation at the European level and thus bring the existing political-administrative order further away from an intergovernmental order" (Egeberg & Trondal 2011: 882). Thus, the establishment of ENTSO-E and ACER could have such an effect, not only due to their role within the NC procedure, but also through other tasks at the European level. With decision-making power located at a European level for this procedure, this could signal an increase in integration within this policy area. However, this integration did not transfer power to the Commission, EP or Council, but rather to independent bodies – consistent with Egeberg and Curtin (2008); Egeberg and Trondal (2011); Nørgård (2006); Støle (2006). These studies have looked at the inclusion of such networks of national regulatory agencies, and the role of ACER is consistent with this. Moreover, while the boards of such agencies are staffed with representatives from national regulators, the inclusion of a Commission representative – indeed the case for ACER – could increase the influence of the Commission on the agency (Egeberg & Trondal 2011).

Distinct from these studies, however, is the collective role of TSOs within the NC procedure. The organizational structure of ENTSO-E resembled an agency in the sense that it was a single body rather than a network. However, this body consisted of private enterprises, yet had been given a major role in making legislation that would apply generally across Europe.

Could this speed up the process of establishing an internal electricity market? Returning briefly to the governance literature mentioned in chapter 1, the contents of the NC procedure meant that negotiations among non-state actors within ACER or ENTSO-E, respectively, would be conducted under the threat imposed by sanctions connected to non-compliance with specific deadlines. A credible threat would here be expected to speed up the process of harmonization, and credibility was reported by informants. A different picture is rendered by Meyer (2012), who finds that a credible threat of governmental intervention could be contra-productive if it makes increases the number of veto players, and makes existing self-regulatory processes politically salient. The NC procedure, while admittedly increasing the number of TSOs, the relative increase depends on which predecessor association ENTSO-E is compared with. Compared with ETSO and UCTE, the increase is low, whereas compared to the smaller regional associations, e.g. Nordel, the increase is substantial. In terms of saliency,

while the NC procedure has attracted some debate, this has notably been driven by actors that are to be consulted, but that do not have a formal say in the procedure (e.g. market actors). At any case, it remains to be seen in the future, but as of June 2012, but with a single exception, all output from the NC procedure had been delivered on time.[51] In the end, harmonized network codes must also be implemented in order to have an effect on market integration, which thus offers a topic for subsequent research.

6.3 Lessons learned for institutional change

The three perspectives have different conceptions of institutional change. Concluding this thesis are a few lessons learned for institutional change.

The power-oriented perspective regards institutional change as shifts in power, or, alternatively, shifts in interests. The sociological perspective regards institutional change as shifts in legitimacy. While coalitions within the former could alternate relatively quickly, within the latter, change does not come as easily, because legitimacy is more fundamental. In both cases, however, there is either institutional change or institutional stability: within the power-oriented perspective, there is either a shift in power giving rise to institutional change, or the dominant coalition keeps an institution in place; within the sociological perspective, while diverging conceptions of legitimacy might exist during a shorter period of time, over time one will be established as the correct one.

The historical perspective has a slightly different take on this. Using path-dependency, it instead regards change as a gradual transformation, where continuity and change occur simultaneously and in interaction with one another. A development triggered by a critical juncture, where initial changes feed back into the system to create further changes over time (positive feedback), has in the literature been referred to as layering which "eats into [the] old core" (Streeck & Thelen 2005: 31) – elements of the old and the new institution coexist, with the relative impact of the latter waxing, and that of the former waning over time. This means that incremental change can occur within a path, and that the temporal location in a path-dependent sequence could affect the change. Thus, an outcome of interest could have long roots. Looking at the final NC procedure, this seems a fitting description.

[51] The framework guideline on cross-border balancing was somewhat delayed.

Appendix 1: Interview Guide

Before we start, could you just briefly state your involvement in the process? *(state, and ask for confirmation)*

Looking at the situation in 2003-2005, how would you describe the cooperation between TSOs (or vertically integrated companies) regarding network codes?

- *Follow-up:* Were there a lot of people working with this within the separate TSOs? Using much time on this as compared to national activities?
- *Follow-up:* Who had an interest in keeping it that way? Who wanted to change this?

Were there any external factors influencing this assesment (either supportive or opposing)?

Thinking back, how would you describe the changes that occurred, resulting in the revised cross-border regulation on electricity in 2009?

- *Follow-up:* What is the change?
- *Follow-up:* Would you describe this procedure as representing something substantially new, or as a revision of existing arrangements?

Do you agree to the following interpretation of this change? A case where industry self-regulation increasingly occurs under a threat of legislative or executive action by the EU, and the Commission.

How do you regard the possibilities that the Commission has for imposing sanctions if the work with developing network codes does not proceed according to the schedule? (e.g. if ENTSO-E uses more than 12 months to draft)

Why did it change?

How did the TSOs respond to the Commission's proposal for change?

Question to the Commission: How did the Commission use the input received from (organization X) during the drafting of the proposal? And did it have any influence on the outcome?

Question to other organizations: How did the Commission respond to your input regarding the third energy package? (Were they heard? What and how? How did other organizations view this?

When you think back at the process, were there any coinciding or preceding events that impacted the procedure?

- *Follow-up:* Why and how did it (not) matter?
- Did event X influence the evaluation of the at the time existing cooperation, or were evaluations less affected by this? In what way?
- *Follow-up:* Did all actors reevaluate? Whose evaluations were (not) affected?
- *Follow-up:* Did this influence the reform process? How?

Would you say that there was a large degree of initial agreement on what changes should be made, or were there differing opinions that made negotiations and compromises vital?

Who, in your opinion, were the key actors? (Supportive/opposing, active/passive)

How did the member states respond to the Commission's proposal of this particular procedure for the development of network codes?

Did you get the impression that this was an important issue for the MS in Council – top political attention or an issue handled at the lower levels member states administration?

Did the role of ACER in drafting non-binding framework guidelines represent a compromise between the Council (didn't want stronger Agency) and EP (wanted stronger Agency)?

Who suggested specific deadlines? Who were in favour, and who were skeptical?

What were the reactions to the proposal that the Commission were to take over the drafting tasks in the case of failure to comply with deadlines by ENTSO-E, or ACER, respectively? How did you respond? How did your organization respond? How did other, relevant organizations (which?) respond?

Compared to the other elements in the 3rd legislative package, how much attention was given to this issue? *(cf. ownership unbundling)*

Are there some national regulators that, in your opinion, are more influential within ERGEG/CEER? Which ones? (Why?) Does this impact outcomes? How?

Why was the procedure shaped the way it is? Were comparisons drawn with other policy areas? Did one look to how other sectors organised cooperation? Where there any role-models that was important for how to shape the procedure? Why?

If we consider the professional/expert communities – did they have similar or different ways of considered such practices? *(For instance between engineers and economists.)*

- *Follow-up if gets a positive reply:* Has there been a change in the relative position of professions within the power sector? Do you think this influenced the shape of the procedure in any way, or do you think this mattered less/not at all?

Would you describe network codes as technical or political?

In your opinion, are these network codes purely cross-border, or do they affect national system as well?

What do you think about the preliminary results of the new arrangements, as well as prospects?

Are some things happening in other ways than the way laid down in the formal procedure? Does informal contact alongside formal cooperation play a role? How?

What about ownership unbundling? As this was not made mandatory – do you observe this as having an impact here?

Is there anything you would like to tell me about which I haven't thought to ask you?

Is there anybody else that you come to think of that might be useful for me to talk to?

Can I contact you later if I have further questions or issues?

Appendix 2: List of Informants

A representative from the European Commission

A representative from the former European Transmission System Operators (ETSO)

A representative from the Union of the Electricity Industry-EURELECTRIC (EURELECTRIC)

A representative from Statnett

A representative from Norway's Mission to the European Union

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